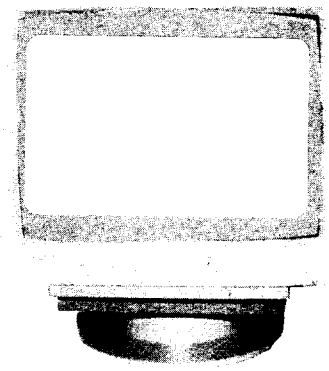
NEC

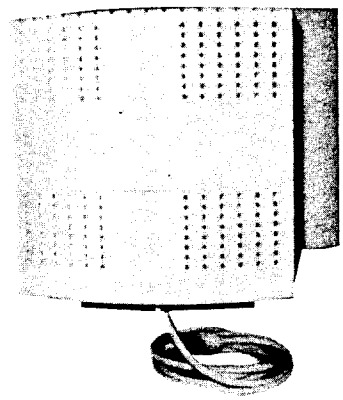
MODELS JC-1403HM
E/EE/ED/N/R
E(PH)/EE(PH)/ED(PH)

COLOR MONITOR MultiSync 2A
SERVICE MANUAL

PART NO. 599910297

Better Service
Better Reputation
Better Profit





SPECIFICATIONS

A. Electrical Description

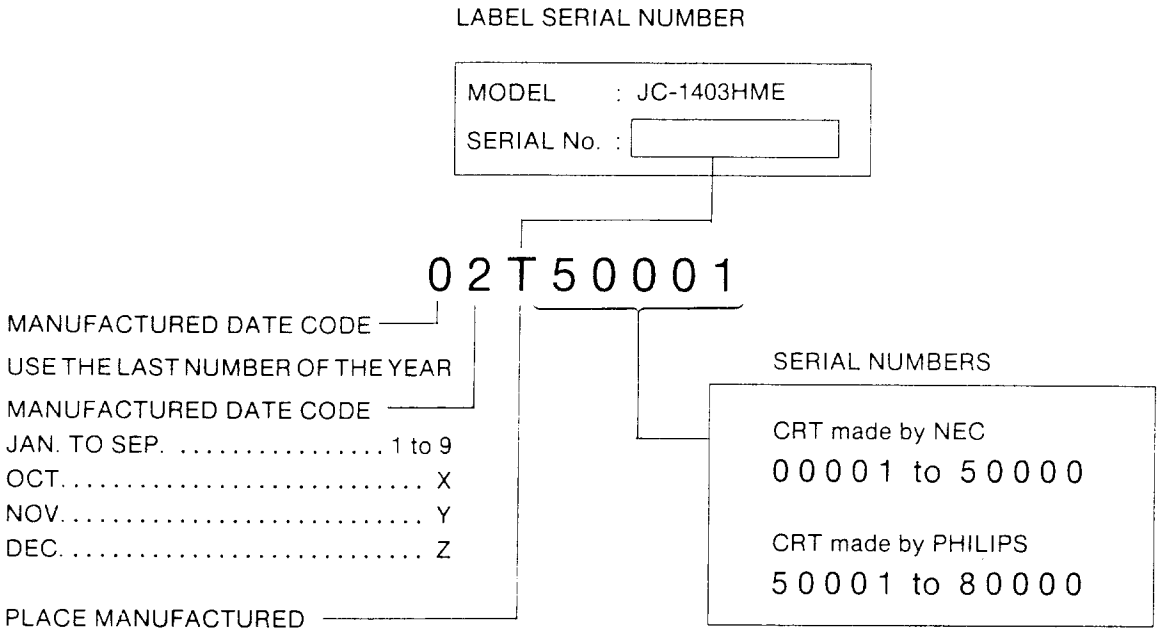
Picture Tube	13 Visual inches diagonal 90 degrees deflection, 0.31 mm Trio dot pitch Dot type black matrix (JC-1403HME/EE/ED/N/R) 90 degrees deflection, approx. 0.29 mm MIN (Variable pitch) Trio dot pitch Dot type black matrix (JC-1403 HME (PH)/EE (PH)/ED (PH) Non-long persistence phosphor, Dark bulb, Direct etch		
Input Signal	Video :ANALOG 0.7 Vp-p/75Ω Positive Sync. :Separate sync. TTL Level Horizontal sync. Positive/Negative Vertical sync. Positive/Negative		
Display Colors	Analog Input	:Unlimited colors	
Synchronization	Horizontal	:31.5kHz and 35kHz (Automatically)	
	Vertical	:56Hz/60Hz/70Hz (Automatically), Noninterlace	
Resolution	Horizontal	:800 dots	
	Vertical	:600 lines	
Video Band Width	38MHz		
Active Display Area	Horizontal	:240mm	Active display area is
	Vertical	:180mm	changed by signal timing
Misconvergence	Less than 0.6mm		
Power Supply	AC 220–240V, 50/60Hz		
Power Consumption	65W		
Environmental Consideration	Operating	Temperature	0°C to +40°C
		Humidity	30% to 80%
	Storage	Temperature	−20°C to +60°C
		Humidity	10% to 90%

NOTE: The above specifications are subject to change without notice for further improvement.

This is a revised SERVICE MANUAL for PART NO. 599910283 MODELS JC-1403HME/EE/R/ED with MODELS JC-1403HMN/E (PH)/EE (PH)/ED (PH) included.

NEC Corporation
TOKYO, JAPAN

Model JC-1403HME/EE/ED with (PH) at the end of the model name are units using CRT made by PHILIPS. Other models are using CRT made by NEC.
Because the exterior appearances are the same, check the serial number of the serial number label pasted at the bottom of the unit as shown below to identify the models using NEC made CRT or PHILIPS made CRT.

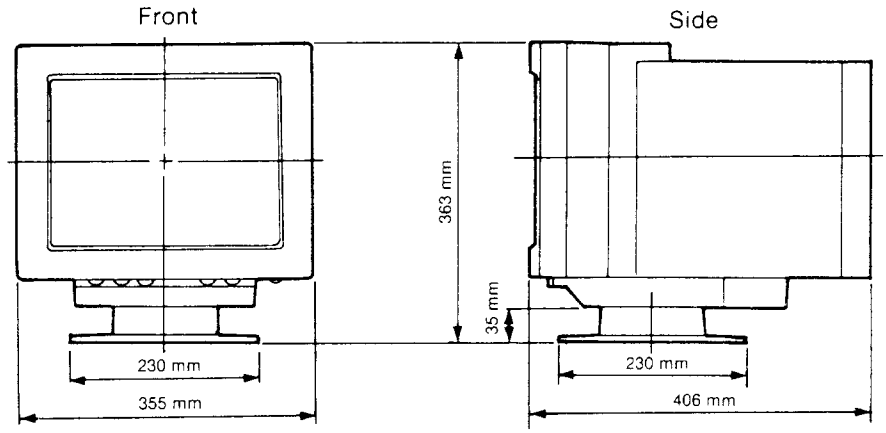


NOTE:

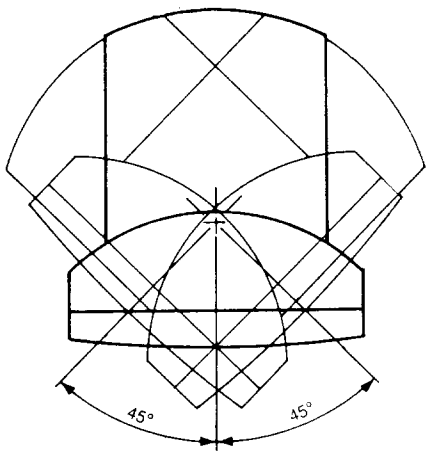
Since MAC II mode is deleted from later models of the conventional models (JC-1403HME/EE/R/ED), ADJUSTMENT PROCEDURE and other subjects related to MAC II mode are deleted from this service manual.

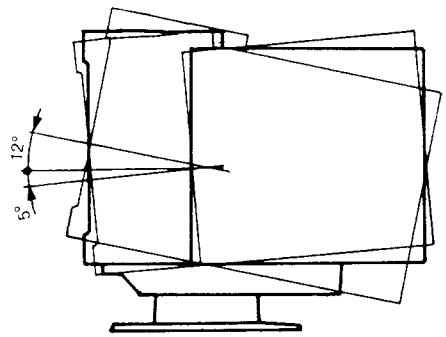
B. Mechanical Description (See below diagrams)

1. Cabinet: Molded plastic cabinet with attachable tilt swivel base.
2. Dimensions: 355(W) × 363(H) ×406(D) mm



3. Tilt Swivel Range





4. Weight: 12.3 kg (JC-1403HME/EE/R/E (PH)/EE (PH))
13.5 kg (JC-1403HMED/N/ED (PH))

5. Controls
POWER SWITCH
BRIGHTNESS CONTROL
CONTRAST CONTROL
V. POSITION CONTROL
V. SIZE CONTROL
H. POSITION CONTROL

6. Input Signal Terminal: 15 PIN MINI D-SUB CONNECTOR (MALE)
(SEE PAGE 3 FOR PIN ASSIGNMENTS)

GENERAL

The MultiSync 2A, the intelligent Monitor from NEC, is a high resolution color monitor that automatically adjusts or senses multiple scanning frequencies generated from graphics adapters. The MultiSync 2A accepts horizontal scan frequencies of 31.5kHz and 35kHz and vertical scan frequencies of 56Hz, 60Hz and 70Hz.

As you can see, "design" was the top priority with the MultiSync 2A. With the intelligence to support the hardware timings of IBM's VGA and MCGA, the MultiSync 2A was also designed to be compatible with many non-IBM graphics boards supporting the Super VGA resolution of 800 × 600.

The MultiSync 2A will operate with IBM PC/XT/AT/386 compatibles and IBM's Personal System/2 (PS/2) series computers.

FEATURES

— The MultiSync 2A automatically scans horizontal frequencies of both 31.5kHz and 35kHz, among the vertical refresh rates of 56Hz, 60Hz and 70Hz.
— The MultiSync 2A has a maximum horizontal resolution of 800 dots by a maximum vertical resolution of 600 lines.
— By accepting ANALOG signal inputs, the MultiSync 2A can display an unlimited palette of colors. The number of colors displayed depends on the graphics board and software being used.
— The MultiSync 2A has a 14" diagonal, non-glare CRT, and yeilds a 13" viewing area.
— A captive signal cable is included with a 15 pin connector that's wired for IBM's VGA configuration. Refer to Appendix B for pin assignments.

CAUTIONS

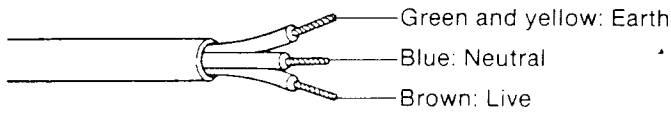
When setting up and using the MultiSync 2A, pay special attention to the following:

— To eliminate eye fatigue, do not use your MultiSync 2A against a bright background or where sunlight or other light sources will shine directly on the monitor.
— The MultiSync 2A should be placed just below eye level for optimum viewing.
— Allow adequate ventilation around the monitor so that heat from the monitor can properly dissipate.
— Neither the monitor itself, nor any other heavy object, should rest on the power cord. Damage to a power cord can cause fire or electrical shock.
— Keep the monitor away from high capacity transformers, electric motors and other strong magnetic fields.
— The MultiSync 2A should not be used in damp, dusty or dirty areas.
— Handle The MultiSync 2A with care when transporting.
— Since the image screen surface of catahode ray tube (CRT M34JUP23XX215 (T4)) used with JC-1403HMN has electric charge prevention treatment applied, to clean the screen surface, use soft paper (such as lens cleaning paper) or cloth (such as cotton and gauze) with neutral detergent or ethyl alcohol* soaked and wipe carefully.

*CUATION
Use care since touching the cabinet with ethyl alcohol can cause chemical reaction resulting in discoloring and spoiling the appearance.

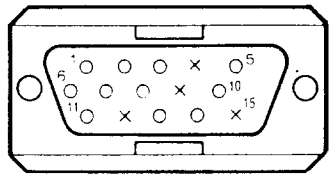
Power cord

In case of JC-1403HME/EE (PH) the end of power cord is as follows.



PIN ASSIGNMENTS AND SIGNAL LEVELS

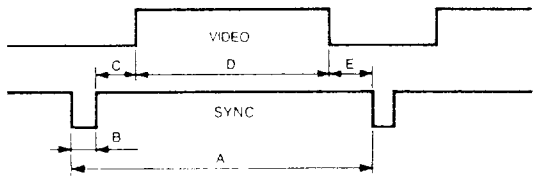
Mini D-SUB Type 15-P



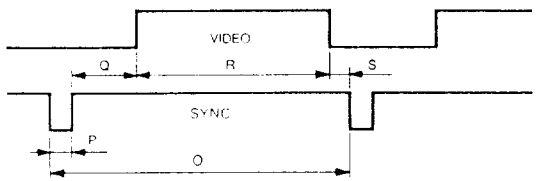
PIN NO.	SIGNAL	PIN NO.	SIGNAL
1	RED	11	GROUND
2	GREEN	12	NO-CONNECTION
3	BLUE	13	H. SYNC
4	NO-CONNECTION	14	V. SYNC
5	GROUND	15	NO-CONNECTION
6	GROUND		
7	GROUND		
8	GROUND		
9	NO-CONNECTION		
10	GROUND		

TIMING CHARTS

HORIZONTAL



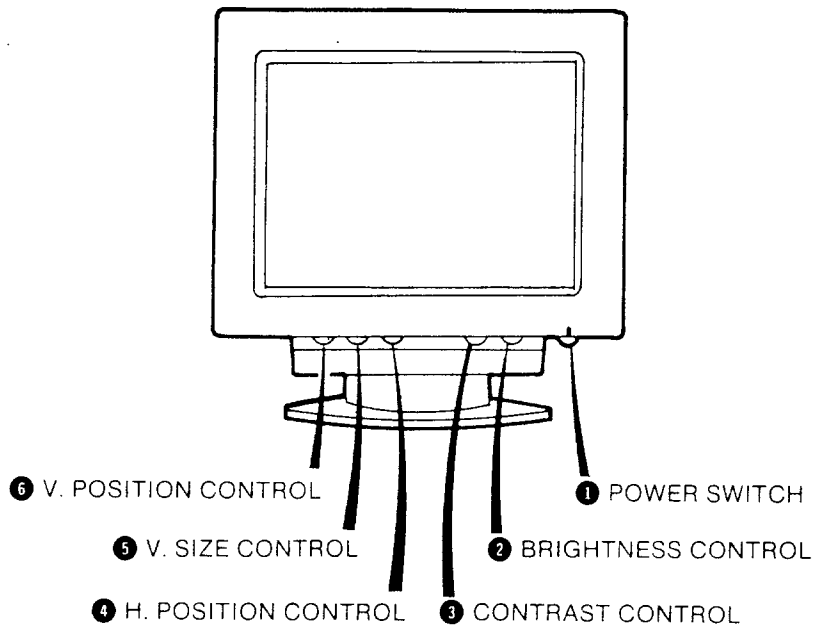
VERTICAL



PRESET TIMING

Horizontal Freq	31.5kHz			35.2kHz
Signal Name	VGA 350	VGA 400	VGA 480	800X 600
Sync. Polarity	POS	NEG	NEG	POS
A μs	31.78	31.78	31.78	28.44
B μs	3.81	3.81	3.81	2.00
C μs	1.91	1.91	1.91	3.56
D μs	25.42	25.42	25.42	22.22
E μs	0.64	0.64	0.64	0.67
Sync. Polarity	NEG	POS	NEG	POS
O ms	14.27	14.27	16.68	17.78
P ms	0.06	0.06	0.06	0.06
Q ms	1.91	1.11	1.05	0.63
R ms	11.12	12.71	15.25	17.07
S ms	1.18	0.38	0.32	0.03

ADJUSTING THE FRONT CONTROLS



❶ ON/OFF (Power Switch)

Used to turn the power ON or OFF. When the power is ON, the LED power indicator, located on the front of the monitor, is lit.

❷ BRIGHT (Brightness Control)

Used to adjust the brightness of the background.

❸ CONT (Contrast Control)

Used to adjust the sharpness of the characters.

❹ H.POSI (Horizontal Position Control)

Adjust this knob for proper horizontal display position. Turn clockwise to reposition display to the right, counterclockwise to reposition to the left.

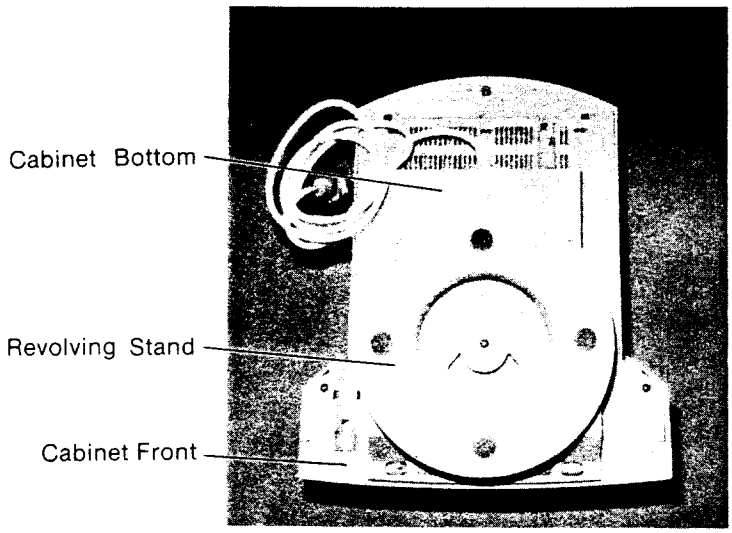
❺ V.SIZE (Vertical Display Size Control)

Adjust this knob for the proper vertical size of the display. Turn clockwise for larger display, counterclockwise for a smaller display.

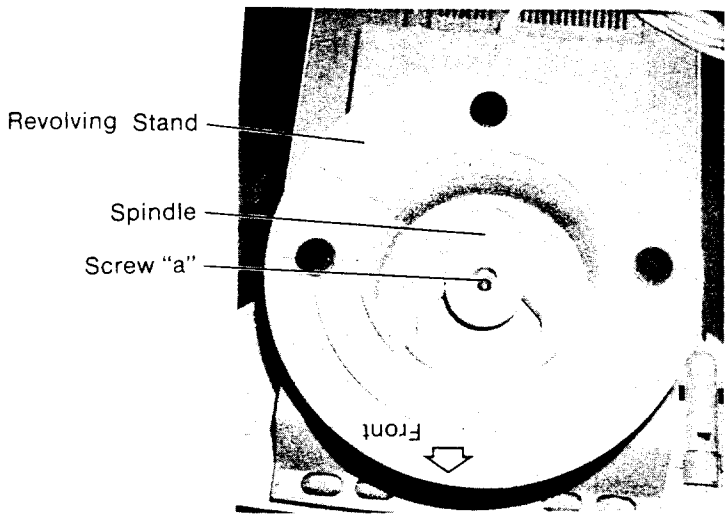
❻ V.POSI (Vertical Position Control)

Adjust this knob for proper vertical positioning of the display.

THE METHOD FOR REMOVING THE TILT SWIVEL BASE

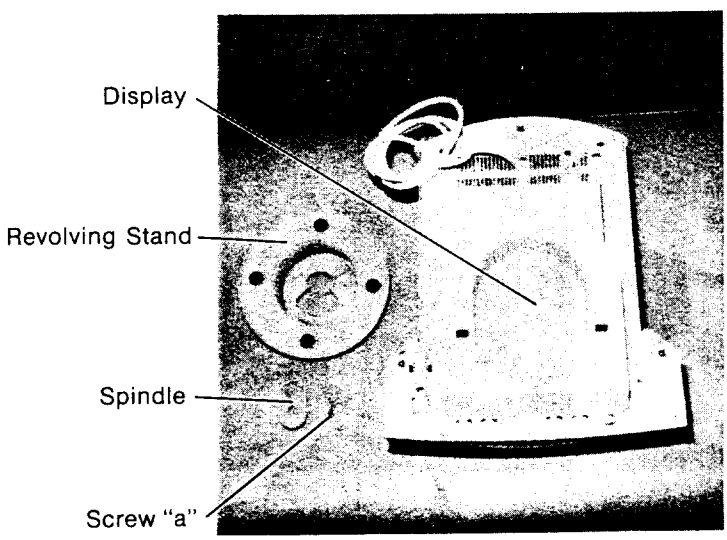


1. Turn the monitor set upside down as shown.



2. Move the revolving stand so that a "↑ FRONT" mark comes to the cabinet front side.

3. Remove the screw "a", then remove both spindle and revolving stand from the display.

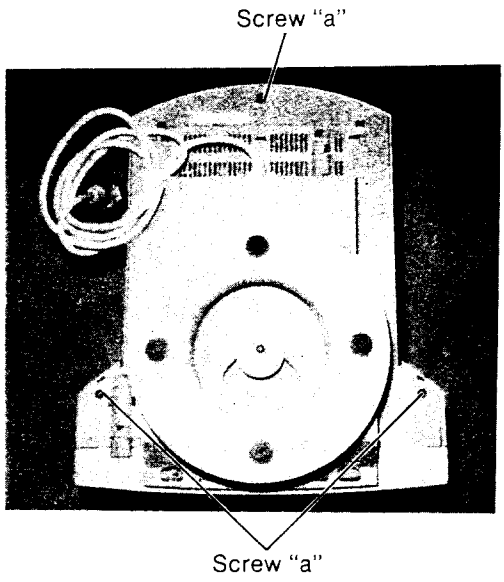


4. The removed parts consist of a display, revolving stand, spindle and screw "a" as shown.

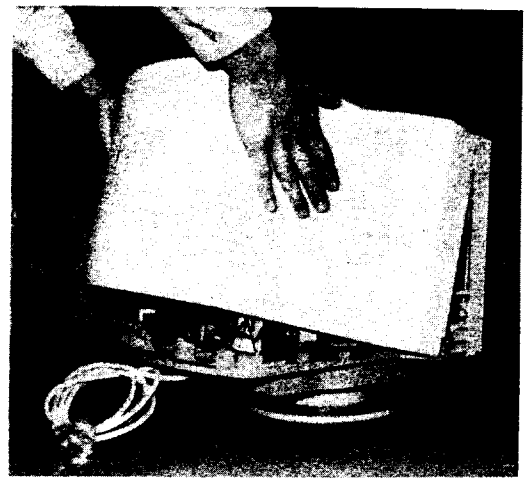
DISASSEMBLY

1. Turn the monitor set upside down as shown. (Top VIEW)

2. Remove three screws "a" from the cabinet bottom.

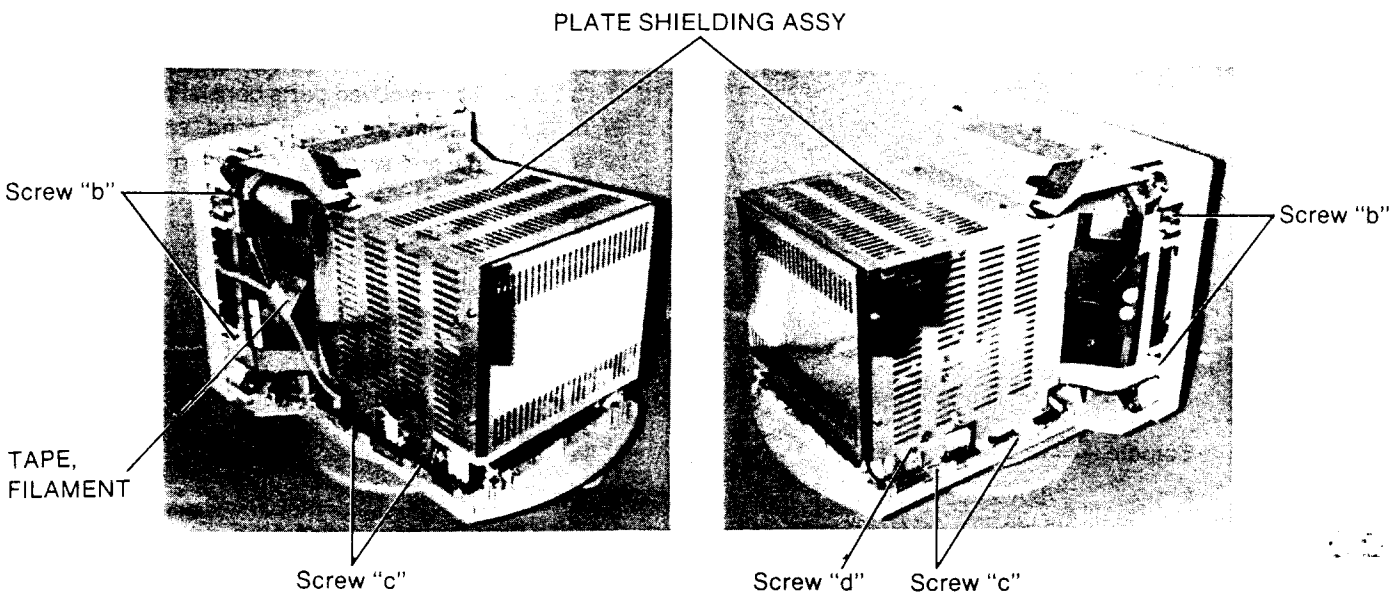


3. Invert the monitor set as normal, then remove the cabinet back.

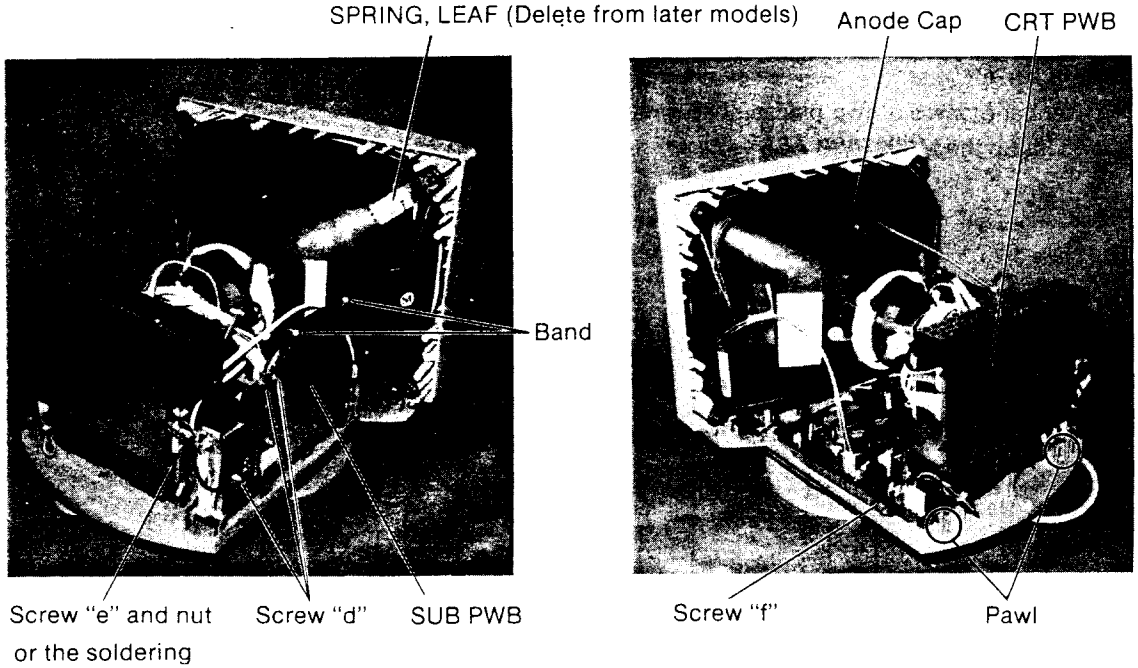


As for the models JC-1403HMED/N/ED (PH) (PLATE SHIELDING ASSY REMOVAL)

1. Remove the four screw "b". (Case of ED, Remove the two screw "b" which locates at Top side.)
2. Remove the four screw "c".
3. Remove a screw "d".
4. Remove the TAPE, FILAMENT, then remove the PLATE SHIELDING ASSY.



4. Remove the three screws "d" and the two band.
   Remove a screw "e" and nut, or the soldering.
   Remove a screw "f".



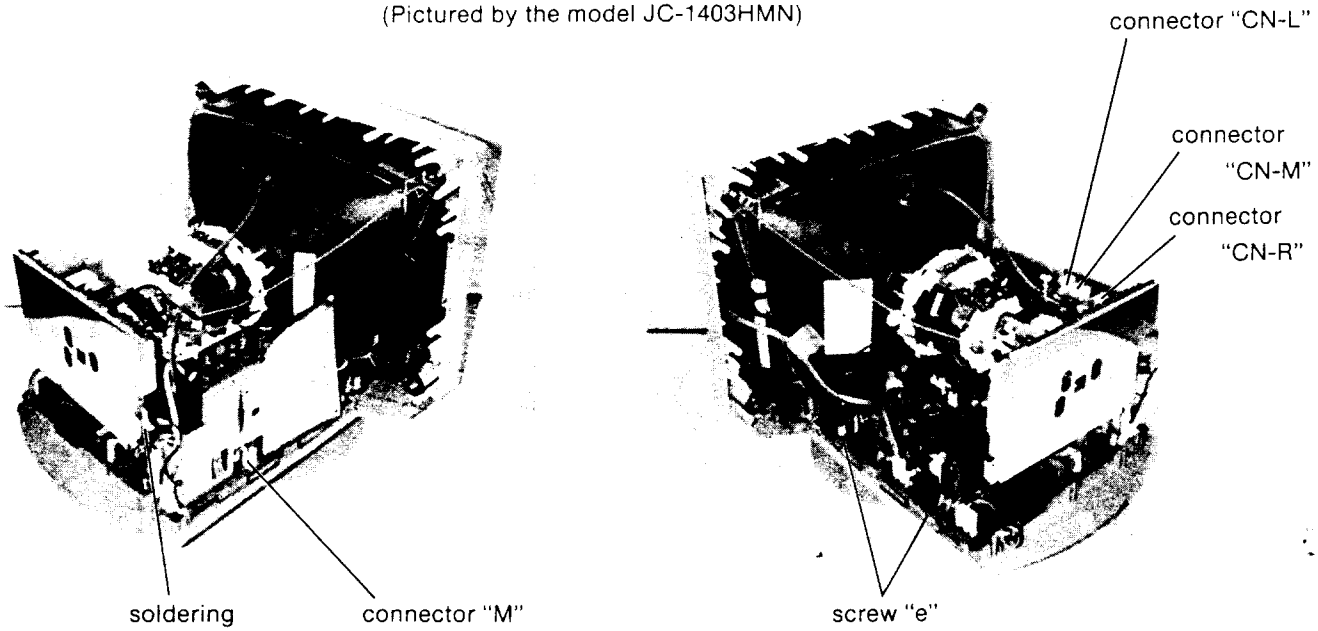
As for the models JC-1403HMED/ED (PH)

4. Remove the soldering.
   Remove the two screws "e".

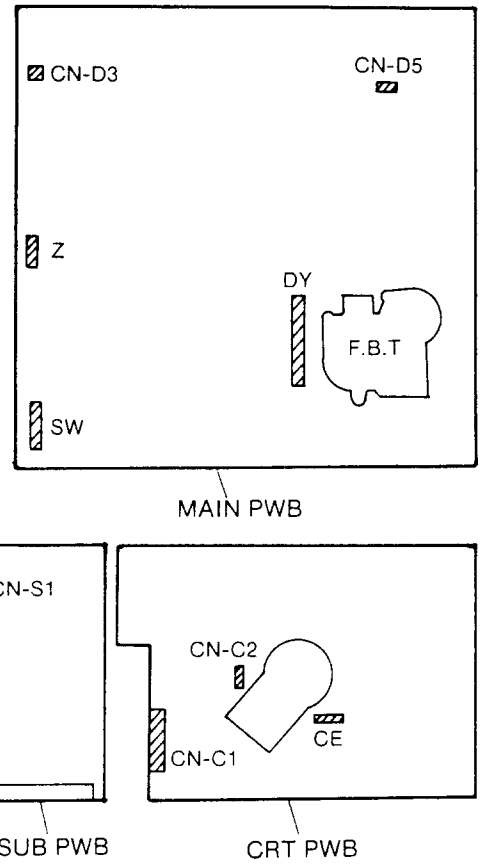
As for the model JC-1403HMN

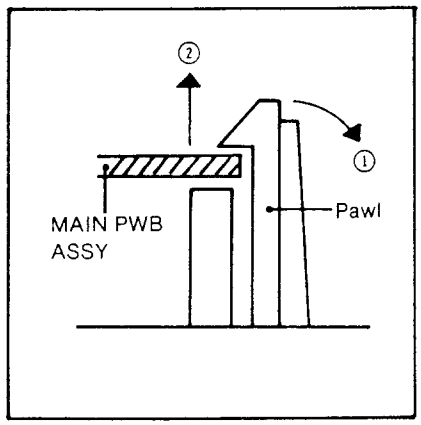
4. Remove the soldering.
   Remove the two screws "e".
   Disconnect the connectors "CN-L", "CN-M" and "CN-R". (from SSI PWB ASSY)
   Disconnect the connector "M". (from MAIN PWB ASSY)

(Pictured by the model JC-1403HMN)



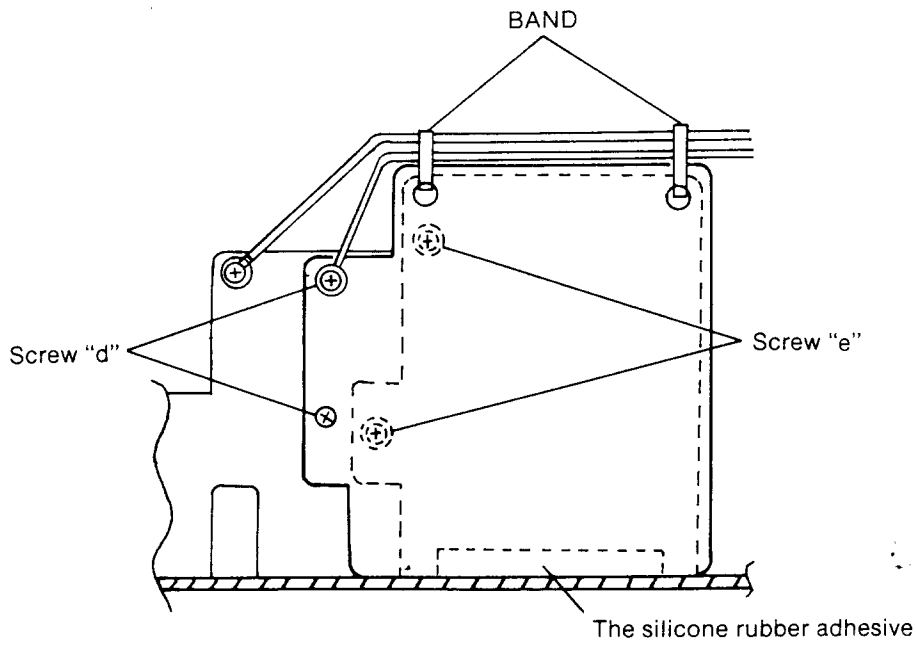
5. Remove the connecter "DY", "Z", "SW", "CN-D3", "CN-D5", and CRT Anode cap. (from MAIN PWB ASSY)
   Remove the connecter "CE", "CN-C1" and "CN-C2". (from CRT PWB ASSY)
   Remove the connecter "CN-S1". (from SUB PWB ASSY)
   Disengage pawls at two places, then slide and lift up the MAIN PWB ASSY.





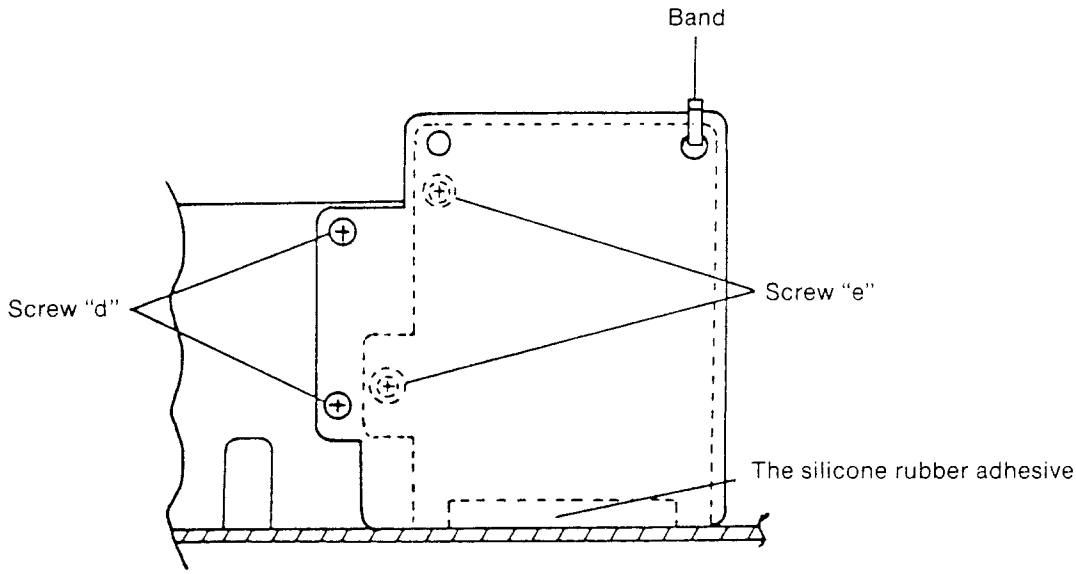
SUB PWB UNIT DIS ASSEMBLY

Remove the connecter "CN-S1"
Remove the two screw "d" and the two band.
Remove the two screw "e".
Cut the silicone rubber adhesive with a cutter.
Lift up the SUB PWB ASSY.



As for the model JC-1403HMED/ED (PH)

Remove the connector "CN-S1".
Remove the two screw "d" and a band.
Remove the two screw "e".
Cut the silicone rubber adhesive with a cutter.
Lift up the SUB PWB ASSY.



As for the model JC-1403HMN

Remove the connector "CN-S1".
Remove the two screw "d" and a band.
Remove the two screw "e".
Cut the silicone rubber adhesive with a cutter.
Lift up the SUB PWB ASSY.

For Service Manuals
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8 Cherry Tree Road, Chinnor
Oxfordshire, OX9 4QY.
Tel (01844) 351694
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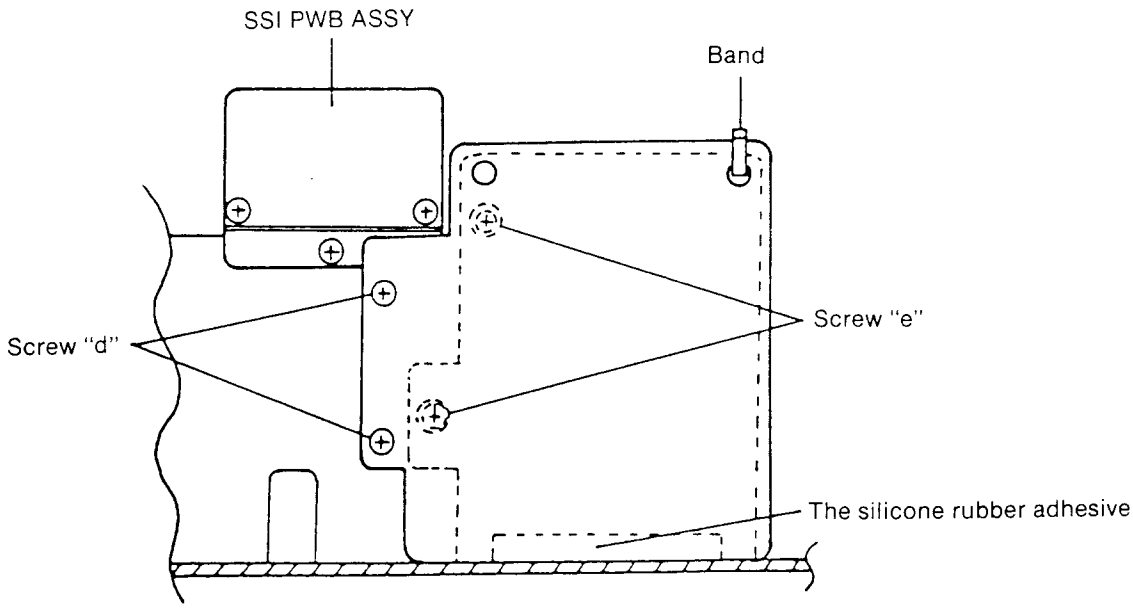
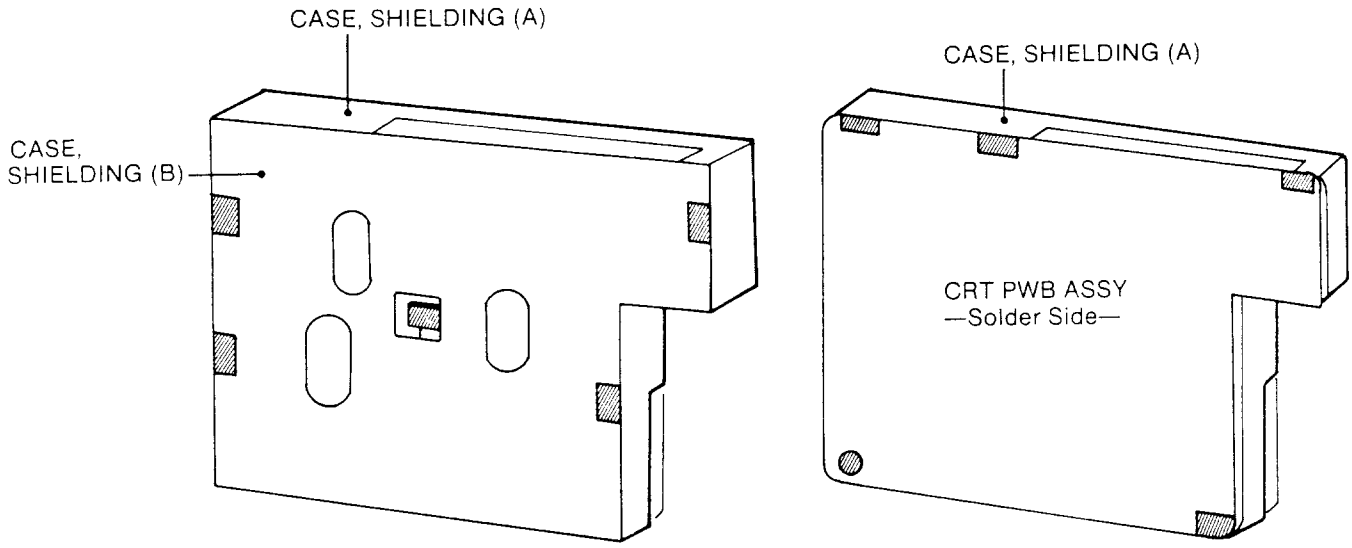


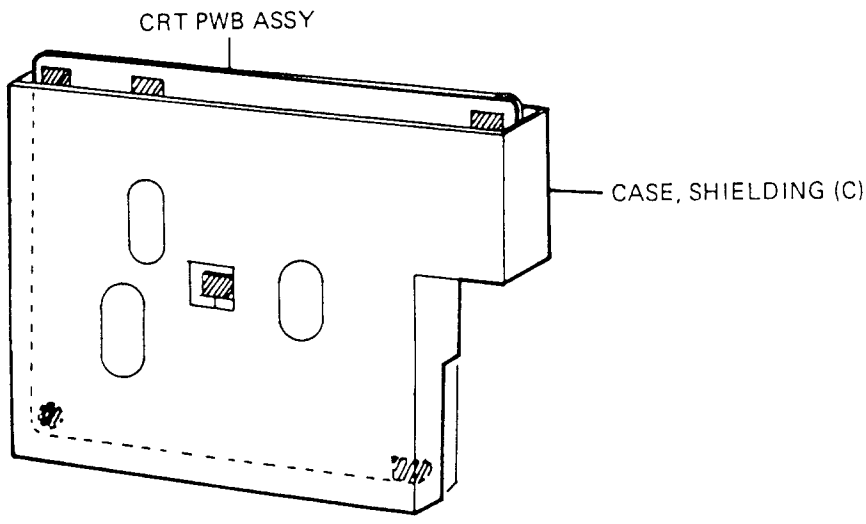
CRT PWB UNIT DIS ASSEMBLY

Remove the connecter "CN-C1", "CN-C2", "CN-C3", "CN-C4" and "CE".
Break soldering marked with ▨, and remove both "CASE, SHIELDING (A)" and "CASE, SHIELDING (B)". Then, disconnect lead wires "EE", "SG" and "FOCUS".

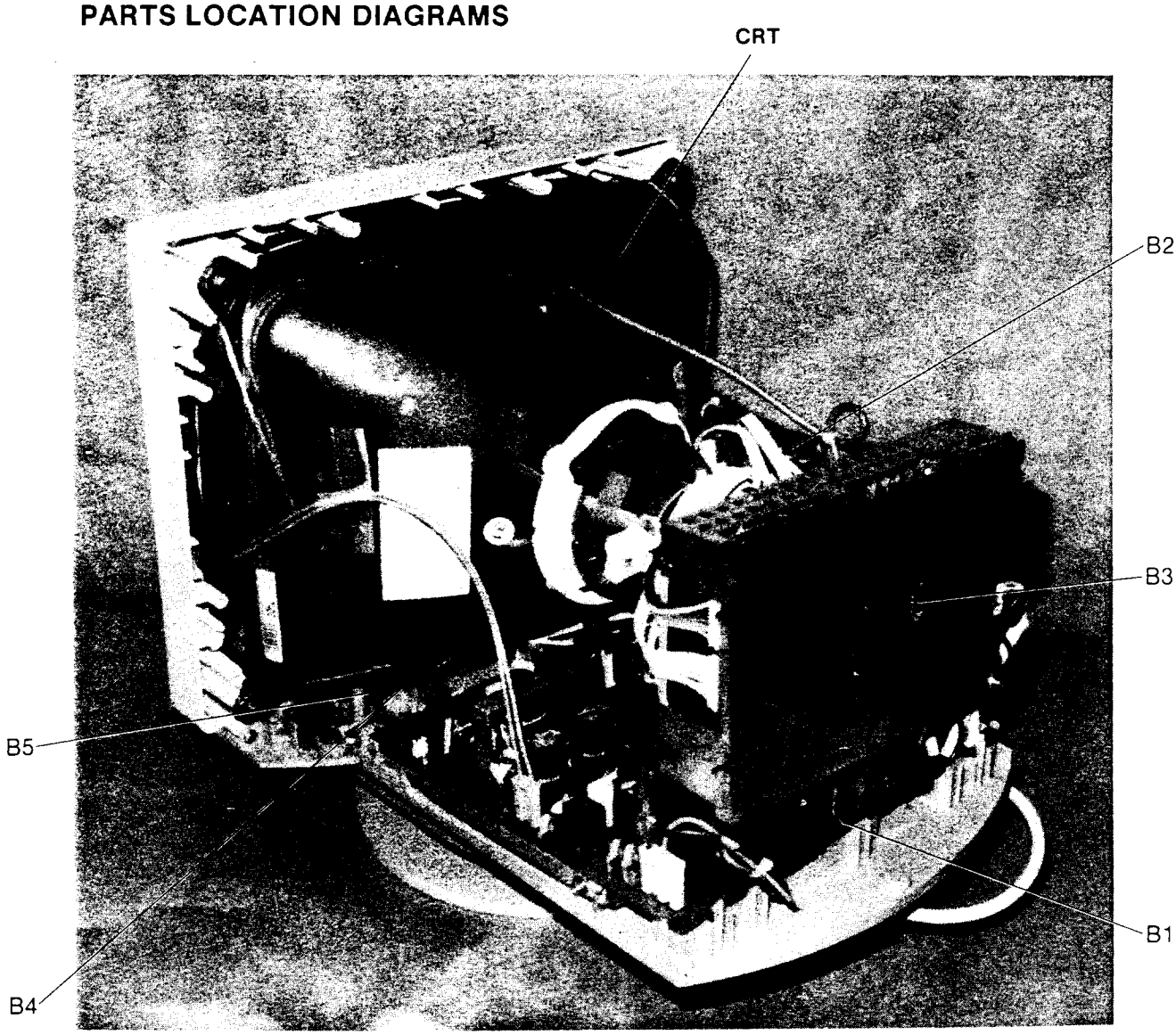


As for the models JC-1403HMED/ED (PH)/N

Remove the connector "CN-C1", "CN-C2", "CN-C3", "CN-C4" and "CE".
Break soldering marked with ▨, and remove both "CASE, SHIELDING (C)".
Then, disconnect lead wires "EE", "SG" and "FOCUS".



PARTS LOCATION DIAGRAMS



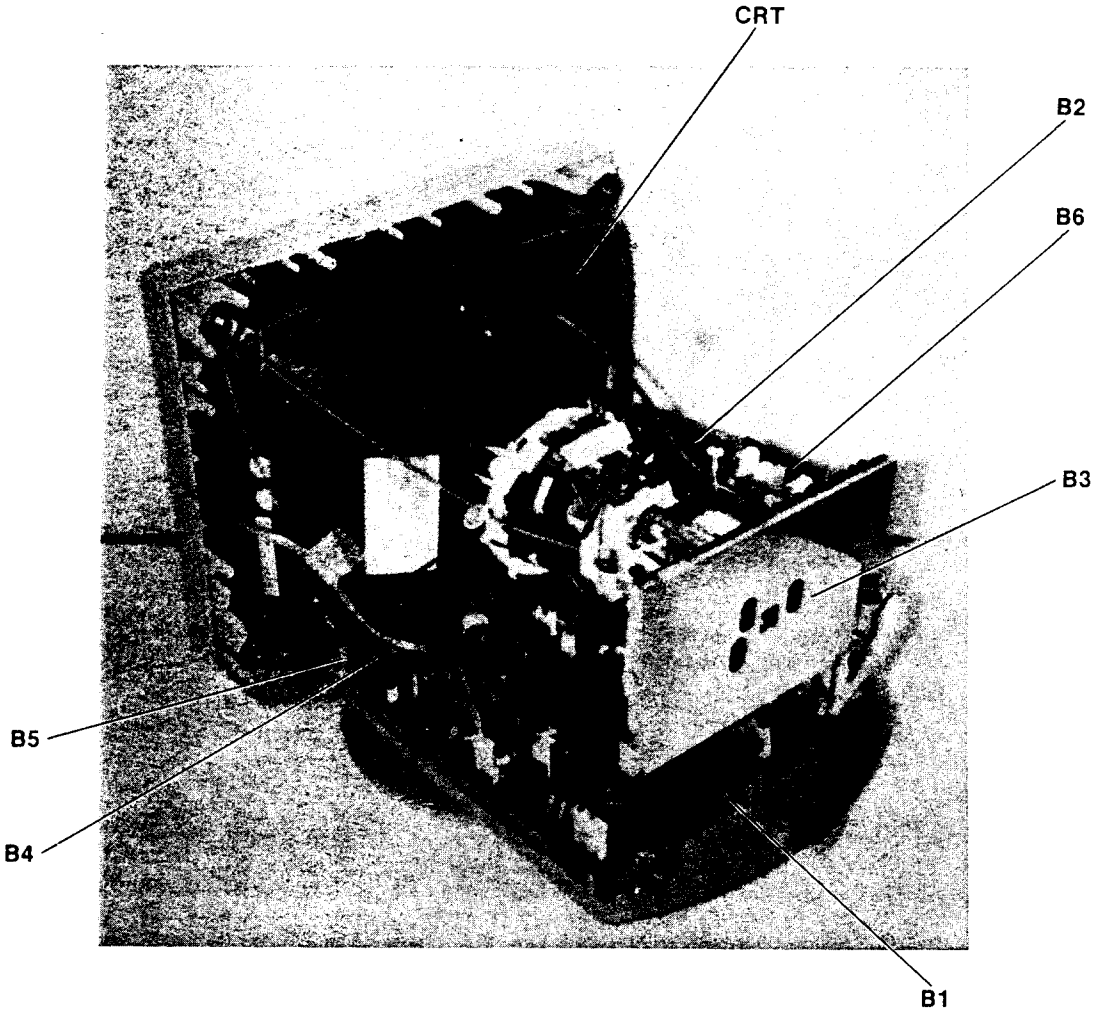
BOARDS

B1	MAIN PWB ASSY	PWE-242
B2	SUB PWB ASSY	PWE-243A
B3	CRT PWB ASSY	PWE-243B
B4	VR PWB ASSY	PWE-243C
B5	LED PWB ASSY	PWE-243D

CRT

JC-1403HME/EE/ED	M34J7023XX183(1)
JC-1403HMR	M34JUP23XX183(1) (R)
JC-1403HME (PH)/EE (PH)/ED (PH)	M34ECL12X46

As for the models JC-1403HMN

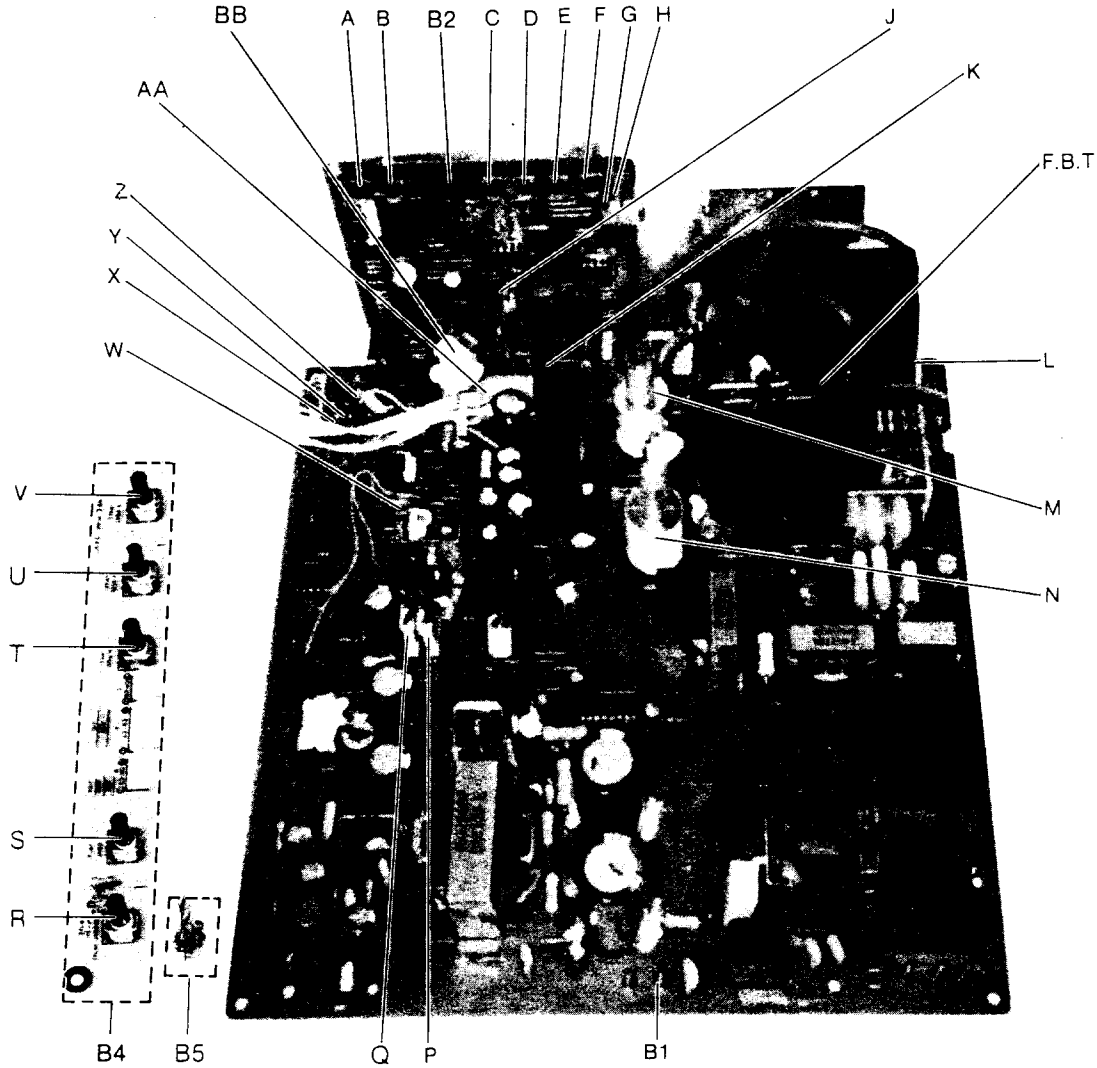


BOARDS

B1	MAIN PWB ASSY	PWE-242
B2	SUB PWB ASSY	PWE-243A
B3	CRT PWB ASSY	PWE-243B
B4	VR PWB ASSY	PWE-243C
B5	LED PWB ASSY	PWE-243D
B6	SSI PWB ASSY	PWE-295

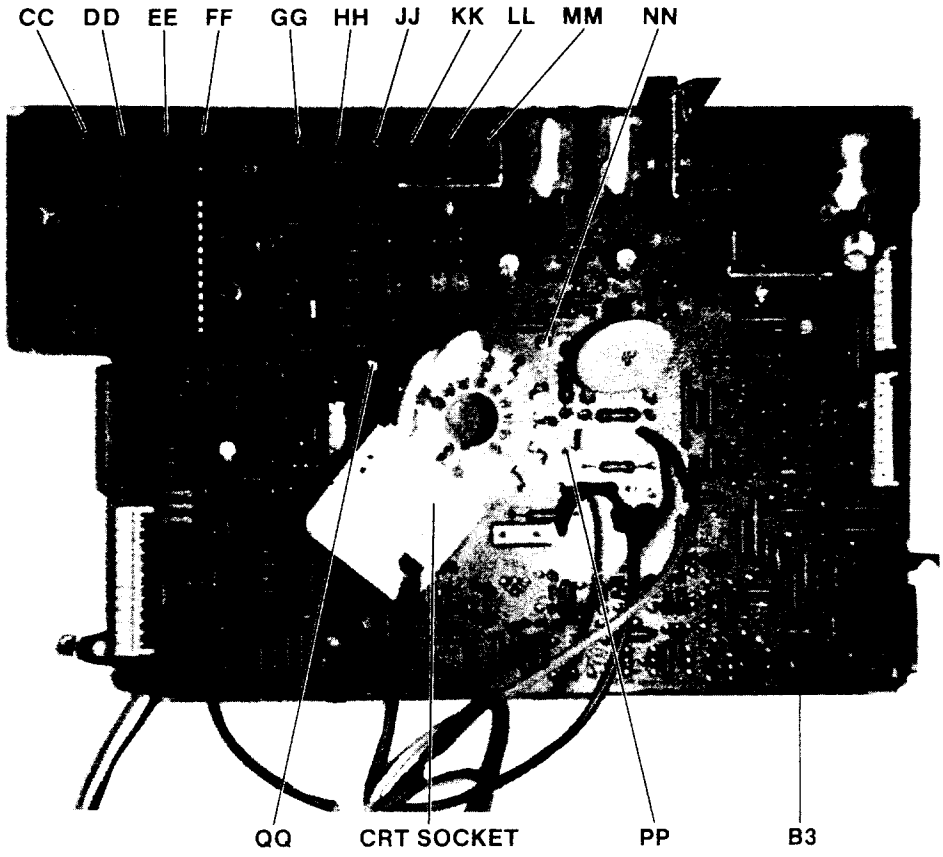
CRT

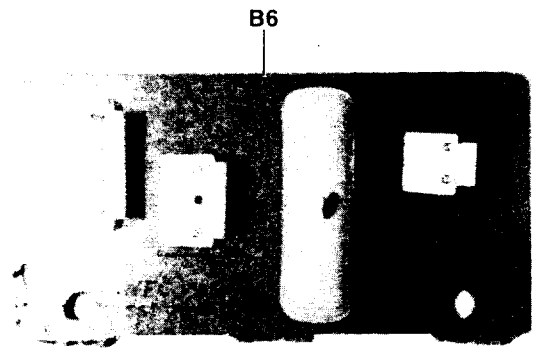
JC-1403HMN	M34JUP23XX215 (T4)



A	VR451 V. LIN	P	CN-D7
B	VR452 V. SUB HEIGHT	Q	CN-D6
C	VR552 H. PHASE (1) (VGA)	R	VR7A2 BRIGHTNESS
D	VR553 H. PHASE (2) (800×600)	S	VR7A1 CONTRAST
E	VR551 H. F/V ADJ	T	RV5A1 H. POSITION
F	VR556 H. HOLD	U	VR4A1 V.SIZE
G	TP502	V	VR4A2 V. POSITION
H	TP501	W	VR501 +12 ADJ
J	TP2001C	X	TP551
K	TP2001A	Y	TP451
L	RH	Z	VR401 SIDE PIN
M	L504	AA	CN-S2
N	L503	BB	VR2001

B1	MAIN PWB ASSY (PWE-242)	B4	VR PWB ASSY (PWE-243C)
B2	SUB PWB ASSY (PWE-243A)	B5	LED PWB ASSY (PWE-243D)





CC	VR701 R. GAIN	KK	VR707 R. SUB. BRIGHT
DD	VR701 G. GAIN	LL	VR708 G. SUB. BRIGHT
EE	VR703 B. GAIN	MM	VR709 B. SUB. BRIGHT
FF	VR710 SUB. CONT	NN	TP701
GG	VR704 R. BIAS	PP	TP02
HH	VR705 G. BIAS	QQ	TP703
JJ	RJR706 B. BIAS	B3	CRT PWB ASSY (PWE-243B)

B6	SSI PWB ASSY (PWE-295)	model JC-1403HMN only

ADJUSTMENT PROCEDURE

Standard Adjustment Conditions

1) Power source voltage: AC220V 50Hz
2) Aging; Adjust after leaving power on for 20 minutes or more.
3) Signals:
   Video: VGA; 800×600 mode, 0.7Vp-p 75Ω terminal, positive polarity
   Synchronizing: VGA, 800×600 mode TTL level positive polarity/negative polarity
   Separate
   Deflection frequency: H. 31.5kHz/35kHz
   V. 56Hz/60Hz/ 70Hz
   Unless otherwise specified, use signal 1 (VGA 350 line mode).
   NOTE: Adjust the signal level to the threshold with the display input section of a signal cable from the signal generator terminated with standard resistance 75Ω.

1. SW. REG. UNIT

1) $+B_1$, (VR651) +110V LINE
   Insert the connector terminals CN-D6 and CN-D7 as shown in Figure 1, and adjust the power supply alone. After adjustment, insert the short connector as shown in Figure 2 to connect the power supply to the monitor set.
   Adjust VR651 to be 110 VDC
   This control is permanently sealed at factory.
   Do not attempt to readjust.
   NOTE: Do not operate the SW. REG. unit itself without any load.

Figure 1

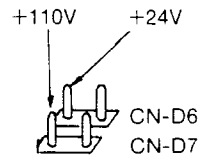
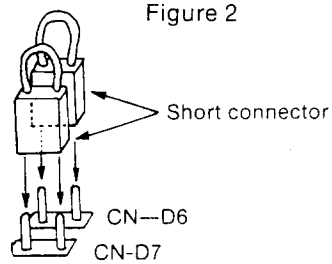


Figure 2



2. Pre-adjustment of SUB PWB

1) F/V converter adjustment
   Input f_H=31.5kHz horizontal sync. positive polarity 12Vp-p between CN-S2 pin 3 and GND.
   Adjust VR551 so that 7.90 ±0.05V DC is obtained between TP502 and GND.
2) High voltage protector setting
   With 38.9 ±0.1V DC applied between TP2001A and GND, adjust VR2001 to obtain 0.2 ±0.05V DC between TP2001C and GND.
   Due to PTB, after adjusting VR2001 seal with an adhesive (TE-385RTV) and cap (74004891).

3. Main Adjustment

Set the external VRs as follows unless otherwise specified.

Front controls

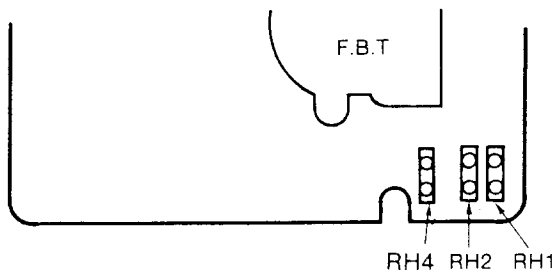
VR7A1 CONTRAST:	Max. (fully clockwise)
VR7A2 BRIGHTNESS:	At point where back raster disappears.
VR4A2 V. POSITION:	Mechanical center
VR4A1 V. SIZE:	Center click position
VR5A1 H. POSITION:	Center click position

3-1) MAIN PWB Adjustment

(1) +12V Adjustment
Receiving all white signal, adjust VR501 (for +12V adjustment) to obtain +12 ±0.1V DC between TP551 and GND.

(2) Horizontal Hold
a) Short TP501 and GND
b) Adjust horizontal hold VR556 (H. HOLD) so that there is one screen.
c) Remove the short between TP501 and GND.
d) Receiving signal 5 (f_H=35kHz), check for synchronization.

(3) Horizontal Raster Centering
a) Adjust L503 and L504 so that horizontal amplitude is approximately 240 mm.
b) When the screen is rolling, centering may be adjusted with VR5A1 (H. POSITION). After adjustment, return VR5A1 to the center click position.
c) With background raster brightened with VR7A2 (BRIGHTNESS) in MAX position, re-insert the connector RH so that the background raster is in the center of the CRT screen.



RH1: for coarse adjustment
RH2: for fine adjustment
RH4: no adjustment

(4) Horizontal Position (Adjust to the raster center)
Adjust respective VRs so that the display area positions in the raster center when the following signals (all white signals) are received. Adjustment may be conducted in arbitrary order.

Signal			VR
VGA	f_H=31.5kHz	1	VR552
800×600	f_H=35kHz	5	VR553

(5) Vertical Linearity
a) Receiving cross-hatched inverted signal, adjust VR452 (V. SUB HEIGHT) so that vertical amplitude is approximately 180 mm.
b) Adjust VR451 (V. LIN) for the optimum vertical linearity.

(6) Vertical Sub Height
Receiving all white signal, adjust VR452 so that vertical screen size is 180 mm.

(7) Side Pin Cushion
Adjust VR401 (SIDE PIN) for the optimum side pin cushion distortion.

(8) Horizontal Width (when receiving all white signal)
a) Receiving signal 5 (800×600), adjust L504 (H. WIDTH COIL) so that horizontal width is 248 mm.
b) Receiving signal 1 (VGA), adjust L503 (H. WIDTH COIL) so that horizontal width is 240 mm.

NOTE: Adjustment must be conducted starting from a), then b).

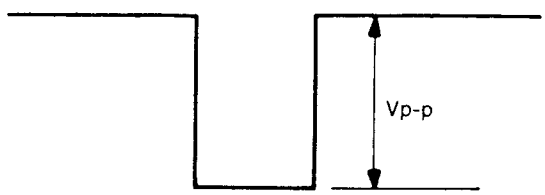
3-2) Adjustment of Video Amplitude and White Balance

NOTE: Check that the video signals are as shown below before performing the main adjustment. In particular, for LVG — 1603, the video signal output level varies according to the signal pattern, so check the level with the signal to be adjusted.
Video: Analog 0.7Vp-p
Synchronizing: Separate TTL level
Unless otherwise specified, use signal 1 for video adjustments.

(1) Initial Settings of Adjustment VRs

VR701, 702, 703	GAIN VR	Fully counterclockwise (Min.)
VR710	SUB CONT VR	Fully counterclockwise (Min.)
VR704, 705, 706	BIAS VR	Fully clockwise (Max.)
VR707, 708, 709	SUB BRIGHT VR	Center

(2) Video Contrast Adjustment (Signal 1: Window pattern)
a) GAIN VR adjustment
① Receive the window pattern.
② Contrast control Fully clockwise
Brightness control Fully counterclockwise
③ Adjust VR701, VR702, and VR703 so that the R, G, and B outputs (TP701, 702, 703) on the VIDEO PWB are 36 Vp-p.
After adjusting, check the Vp-ps again and readjust if they do not conform to the settings.



b) SUB-CONT. VR adjustment
① Contrast control Fully counterclockwise
Brightness control Fully clockwise

② Adjust VR710 (SUB. CONT) so that the G (TP702) output on the CRT PWB is 10Vp-p.
After adjusting, check that the R (TP701) and B (TP703) outputs are 10Vp-p ±0.5Vp-p.
If not, fine-adjust VR710 so that the R, G, and B outputs are within the range of 10Vp-p ±0.5Vp-p.

(3) Cut-off Adjustment (0.08Vp-p all white signal)

a) Contrast Control — Fully clockwise
Brightness control — Fully counterclockwise

b) Short TP451 and TP551 at 12kΩ
Turn the screen VR clockwise a little by little until a single color appears horizontally. Adjust the screen VR so that the color can faintly be seen. This color is the reference color for the cut-off adjustment.

c) Turn the bias VRs for the colors other than the reference color counter clockwise for until they are as bright as the reference color.

d) Release the short-circuit between TP451 and TP551.

NOTE: **Perform the cut-off adjustment in as dark a place as possible to make the white tracking which follows better.**

(4) SUB BRIGHT VR Adjustment

a) Contrast control — Fully clockwise
Brightness control — Fully clockwise

b) Receive all black signal.

c) Adjust VR707 (R. SUB BRIGHT) to VR709 (B. SUB BRIGHT) so that the background raster becomes white.

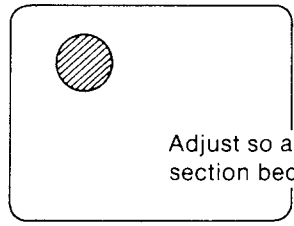
(5) White Balance Adjustment

a) Contrast control — Fully clockwise
Brightness control — At a point where no background raster appears.

b) H gray scale (16 gradations).
(Window pattern — within a range in which there is no ABL.)
Check that the white balance is proper for all gradations.
If not, fine adjust the GAIN VR, VR701 and VR703 to make it white.
The color temperature for the white should be adjusted around: x=0.281
y=0.311

NOTE: Do not move VR702: G.GAIN

(6) Focus Adjustment (Signal 5)
(4-dot missing signal)
Contrast control — Fully clockwise
Brightness control — At a point where background raster disappears.
Turn the focus control and adjust for the optimum focus.



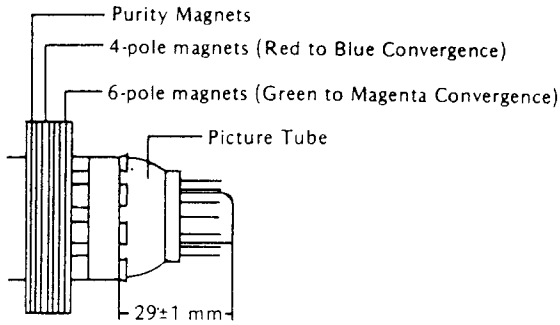
(7) Purity Adjustment (CRT made by NEC)

a) Be sure that the display is not being exposed to any external magnetic fields.

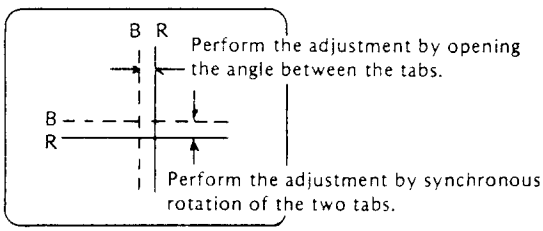
b) Ensure that the spacing between the Purity, Convergence Magnet, (PCM), assembly and the CRT stem is 29 mm ±1 mm. (See below diagram)

c) Produce a complete, red pattern on the display. Adjust the Purity magnet rings on the PCM assembly to obtain a complete field of the color red. This is done by moving the two tabs in such a manner that they advance in an opposite direction but at the same time to obtain the same angle between the two tabs, which should be approximately 180°.

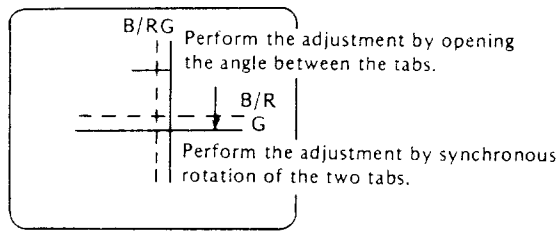
d) Check the complete blue and complete green patterns to observe their respective color purity. Make minor adjustments if needed.



Purity, Convergence Magnet Assembly (PCM)


B R
Perform the adjustment by opening the angle between the tabs.
B
R
Perform the adjustment by synchronous rotation of the two tabs.

Red to Blue Convergence
(Magenta)


B/RG
Perform the adjustment by opening the angle between the tabs.
B/R
G
Perform the adjustment by synchronous rotation of the two tabs.

Green to Magenta Convergence
(White)

(8) Convergence Adjustment (CRT made by NEC)

a) Produce a magenta crosshatch on the display.

b) Adjust the focus for the best overall focus on the display.
Also adjust the brightness to the desired condition.

c) Vertical red and blue lines are converged by varying the angle between the two tabs of the 4-pole magnets on the PCM assembly. (See above diagrams)

d) Horizontal red and blue lines are converged by varying the two tabs together, keeping the angle between them constant.

e) Produce a white crosshatch pattern on the display.

f) Vertical green and magenta lines are converged by varying the angle between the two tabs of the 6-pole magnets.

g) Horizontal green and magenta lines are converged by varying the two tabs together, keeping the angle between them constant.

For Service Manuals
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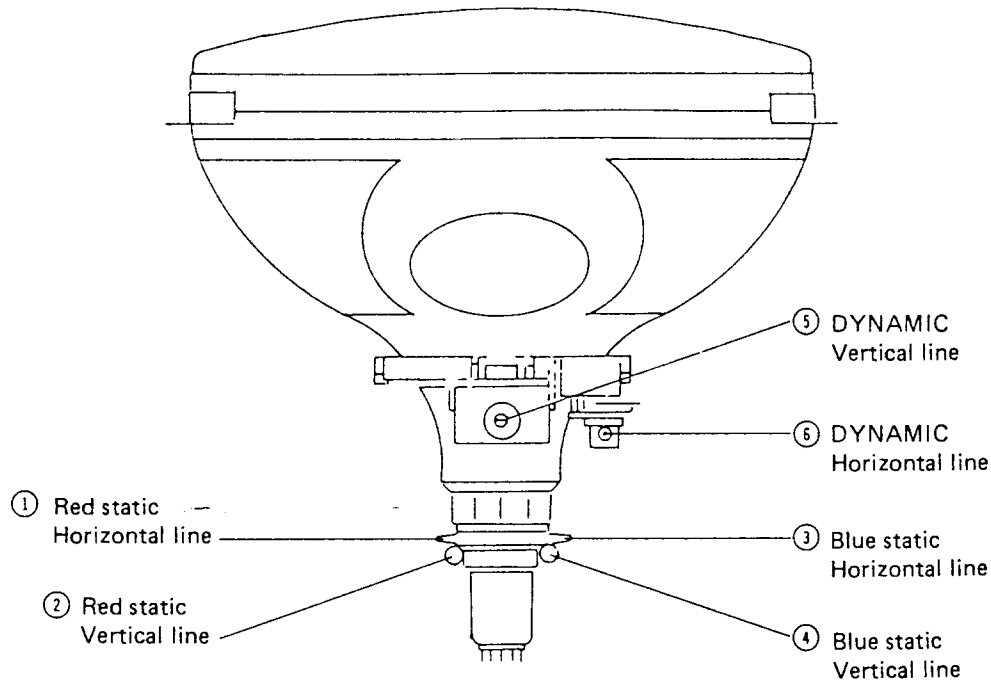
Oxfordshire, OX9 4QY.
Tel (01844) 351694
Fax (01844) 352554
email:- mauritron@dial.pipex.com

TOP VIEW



(7') Purity and Convergence Adjustment (CRT made by PHILIPS)

1) Produce a YELLOW (RED and GREEN) crosshatch on the display.
2) Adjust the focus for the best overall focus on the display. Also adjust the brightness to the desired condition.
3) Adjust convergence in the center of the screen by turning knobs ① and ② to adjust the RED static.
4) Produce a white crosshatch pattern on the display.
5) Adjust convergence in the center of the screen by turning knobs ③ and ④ to adjust the BLUE static.
6) Adjust convergence on the peripheral of the screen by turning knobs ⑤ and ⑥ .

TIMING OF REFERENCE SIGNALS

BY LVG — 1600							
Indication address	Abbreviation	Unit	ROM address	Signal 1	Signal 2	Signal 3	Signal 5
				VGA 350	VGA 400	VGA 480	800×600
0	CLOCK	MHz	X00	28.324F	28.324F	28.324F	36.000F
1	H FREQ	kHz	X03	31.470F	31.470F	31.470F	35.160F
2	V FREQ	Hz	X06	70.000F	70.000F	59.943F	56.000F
3	CHR-SIZE	DOT	X09	09X10	09X10	09X10	10X15
4	Nht	CHR	X0B	F100	F100	F100	F102
5	Nhd	CHR	XOD	F080	F080	F080	F080
6	Nhsp	CHR	XOF	F082	F082	F082	F082
7	Vpw-Hpw	V.-RASTER H-CHR	X11	02X12	02X12	02X12	02X07
8	Nadj	RASTER	X13	09	09	05	10
9	Nvt	LINE	X14	F044	F044	F052	F041
10	Nvd	LINE	X16	F035	F040	F048	F040
11	Nvsp	RASTER	X18	F038	F041	F049	F040
12	Nvspdj	RASTER	X1A	07	02	00	01
13	INT		X1B	00	00	00	00
14	OUT		X1C	F00001	F00001	F00001	F10001

DATA FORMAT FOR USING Quantum 801C

TIMING PARAMETERS:

Rear Time Parameters		Signal No.	Description
Dot Rate	MHz	1.	H: 31.47KHz V: 70Hz (350 Lines)
Horizontal Rate	KHz	2.	H: 31.47KHz V: 70Hz (400 Lines)
Vertical Rate	Hz	3.	H: 31.47KHz V: 60Hz (480 Lines)
		5.	H: 35.16KHz V: 56Hz

Non-Real Time Parameters	
Horizontal	Vertical
Dots/Character	Lines/Character
Total	Total
Characters	Rows
Drive Delay	Drive Delay
Drive Width	Drive Width
	Step Width

OPTION PARAMETERS

Signal Gating	
Composit Sync.	OP 1.—0=off 1=on
Vertical Step	OP 2.—0=off 1=on
Horizontal Drive	OP 3.—0=off 1=on
Vertical Drive	OP 4.—0=off 1=on

Signal Polarity	
Composite Sync.	OP 5.—0=non-inverted 1=inverted
Vertical Step	OP 6.—0=non-inverted 1=inverted
Horizontal Drive	OP 7.—0=non-inverted 1=inverted
Vertical Drive	OP 8.—0=non-inverted 1=inverted
Video	OP 13.—0=non-inverted/positive 1=inverted/positive 2=non-inverted/negative 3=inverted/negative

Interlace Mode	OP 9.—0=non-interlace 1=interlaced sync only 3=interlaced sync & video
Video Mode	OP 10.—0=monochrome 1=color
Duty Cycle	OP 11.—0=50% 1=100% (OP 12.0) 0 or 1=100% (OP 12.2)
Character Clocking Mode	OP 12.—0=single-phase 2=dual-phase
Horizontal Skew	OP 14.—skew right 0-3 dots
Vertical Skew	OP 15.—skew down 0-9 lines
Cursor	OP 16.—0=off 1=fast blink 2=slow blink 3=on continuous

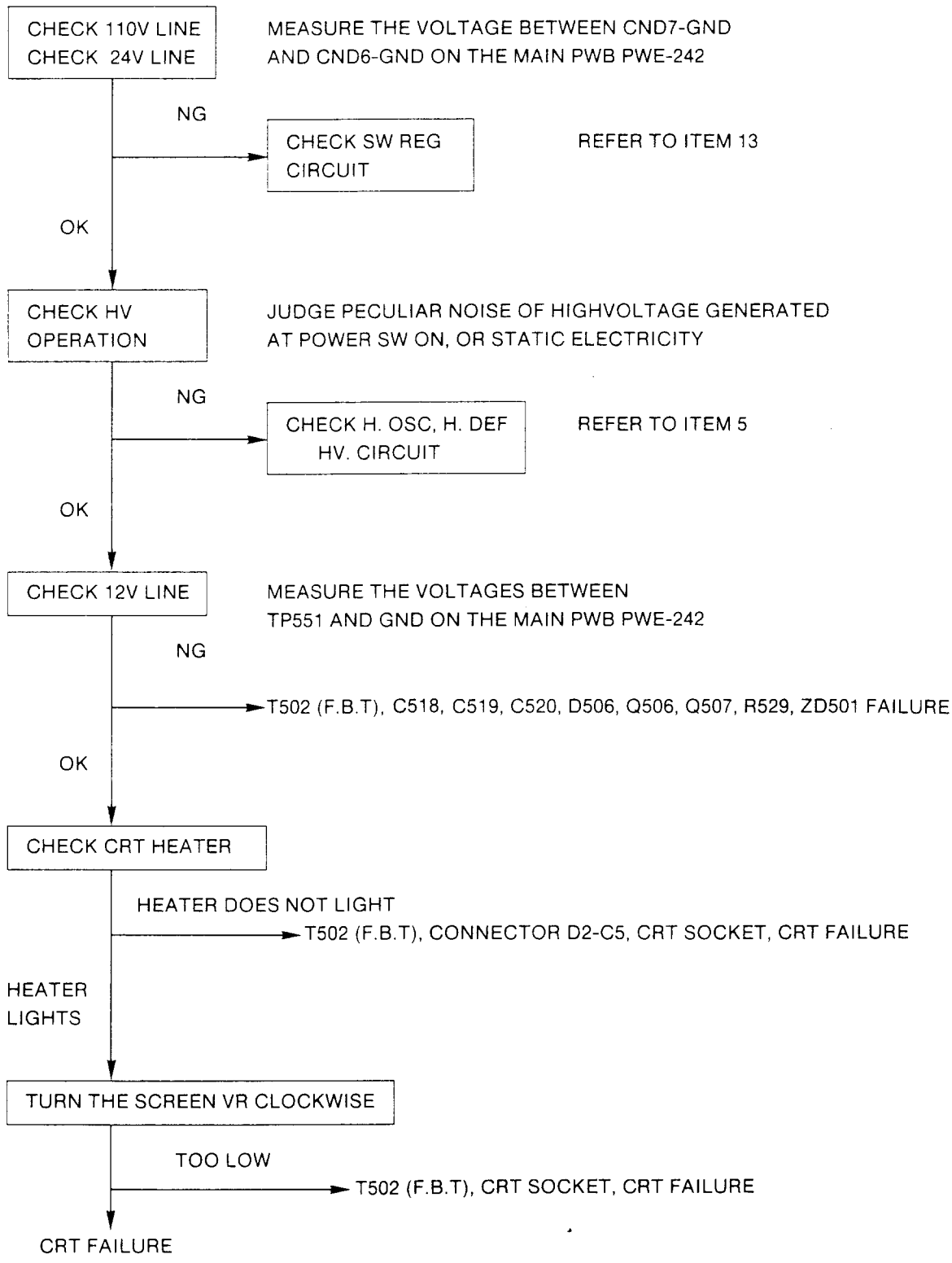
SIGNALS FOR USING QUANTUM 801C

	Signal 1	Signal 2	Signal 3	Signal 5
Real Parameters				
Dot Rate (MHz)	28.320	28.320	28.320	36.000
Horizontal Rate (KHz)	31.470	31.470	31.470	35.160
Vertical Rate (Hz)	70.000	70.000	59.943	56.000
Non-Real Time Parameters				
H: Dots/Character	9	9	9	10
Total	100	100	100	102
Characters	80	80	80	80
Drive Delay	82	82	82	82
Drive Width	12	12	12	7
V:Lines/Character	10	10	10	15
Total	449	449	525	625
Rows	35	40	48	40
Drive Delay	38	41	49	40
Drive Width	2	2	2	2
Step Width	—	—	—	—
Signal Getting				
Composite Sync.	1			
Vertical Step.	0			
Horizontal Drive	1			
Vertical Drive	1			
Signal Polarity				
Composite Sync.	1			
Vertical Step.	—			
Horizontal Drive	0P	1N	1N	0P
Vertical Drive	1N	0P	1N	0P
Video	0			
Interlace Mode	0			
Video Mode	1			
Duty Cycle	0			
Character Clocking Mode	0			
Horizontal Skew	—			
Vertical Skew	—			
Cursor	—			
Signal Name	VGA350	VGA400	VGA480	800×600

TROUBLE SHOOTING

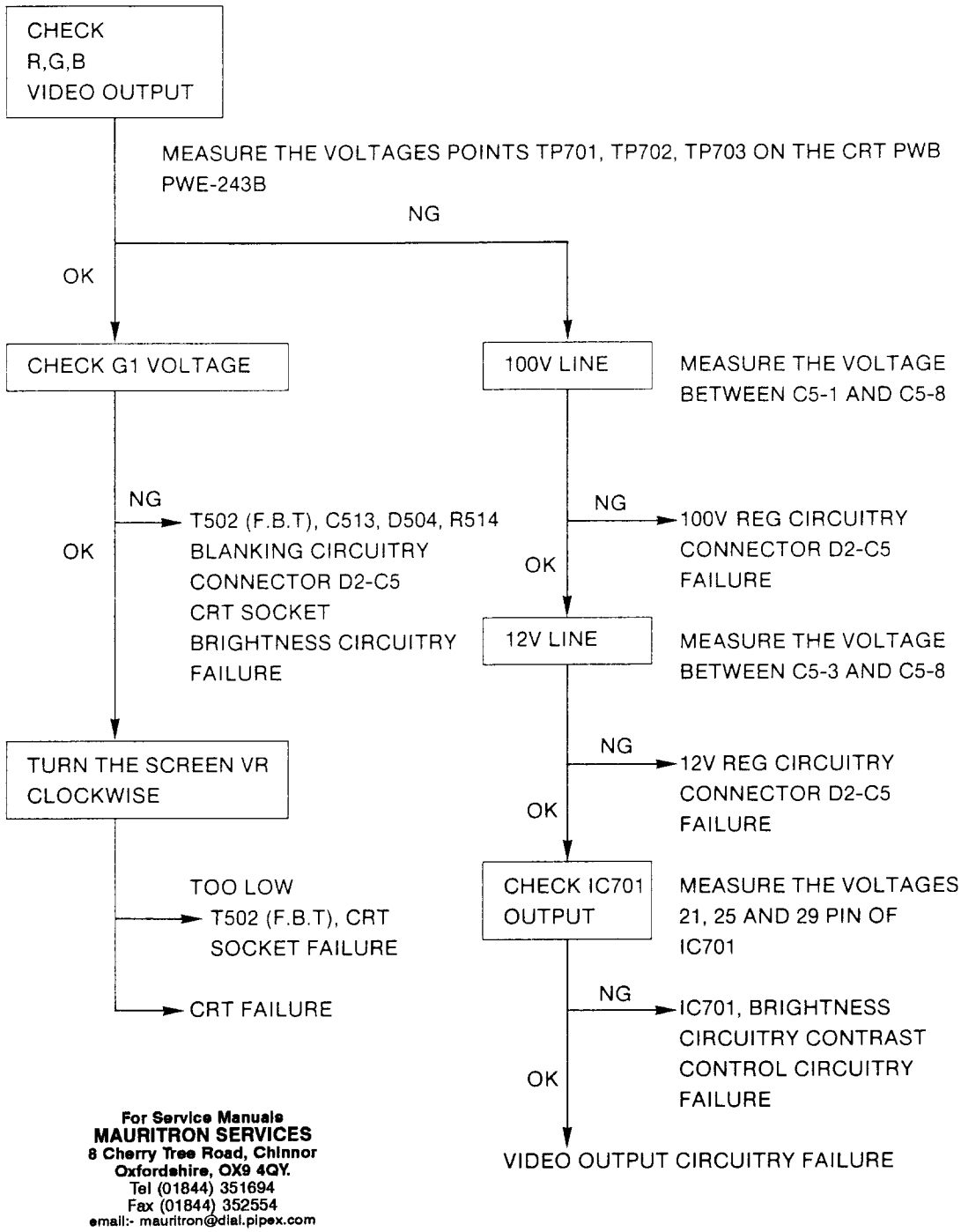
BEFORE USING THIS CHART, PLEASE REFER TO THE TROUBLE SHOOTING OF THE USER'S MANUAL.

1. NO RASTER


CHECK 110V LINE
CHECK 24V LINE
MEASURE THE VOLTAGE BETWEEN CND7-GND AND CND6-GND ON THE MAIN PWB PWE-242
NG
CHECK SW REG CIRCUIT
REFER TO ITEM 13
OK
CHECK HV OPERATION
JUDGE PECULIAR NOISE OF HIGHVOLTAGE GENERATED AT POWER SW ON, OR STATIC ELECTRICITY
NG
CHECK H. OSC, H. DEF HV. CIRCUIT
REFER TO ITEM 5
OK
CHECK 12V LINE
MEASURE THE VOLTAGES BETWEEN TP551 AND GND ON THE MAIN PWB PWE-242
NG
T502 (F.B.T), C518, C519, C520, D506, Q506, Q507, R529, ZD501 FAILURE
OK
CHECK CRT HEATER
HEATER DOES NOT LIGHT
T502 (F.B.T), CONNECTOR D2-C5, CRT SOCKET, CRT FAILURE
HEATER LIGHTS
TURN THE SCREEN VR CLOCKWISE
TOO LOW
T502 (F.B.T), CRT SOCKET, CRT FAILURE
CRT FAILURE

2. ABNORMAL VIDEO ON CRT SCREEN

TOO BRIGHT
TOO DARK



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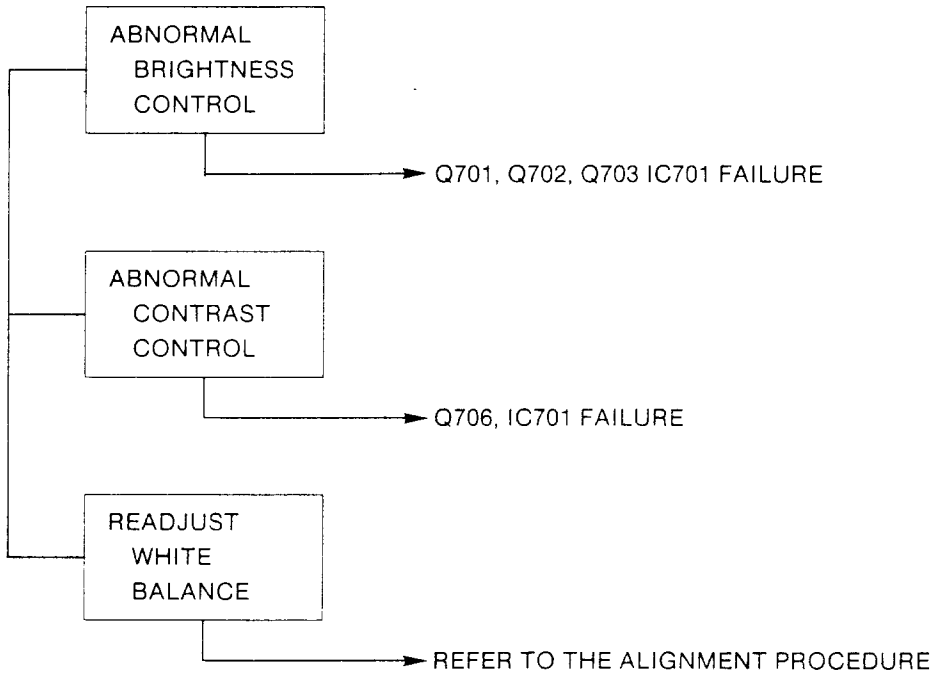
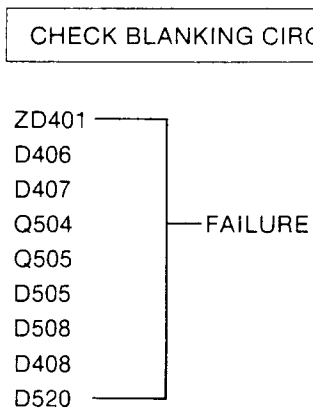
email:- mauritron@dial.pipex.com

3. ABNORMAL WHITE BALANCE AND TRACKING



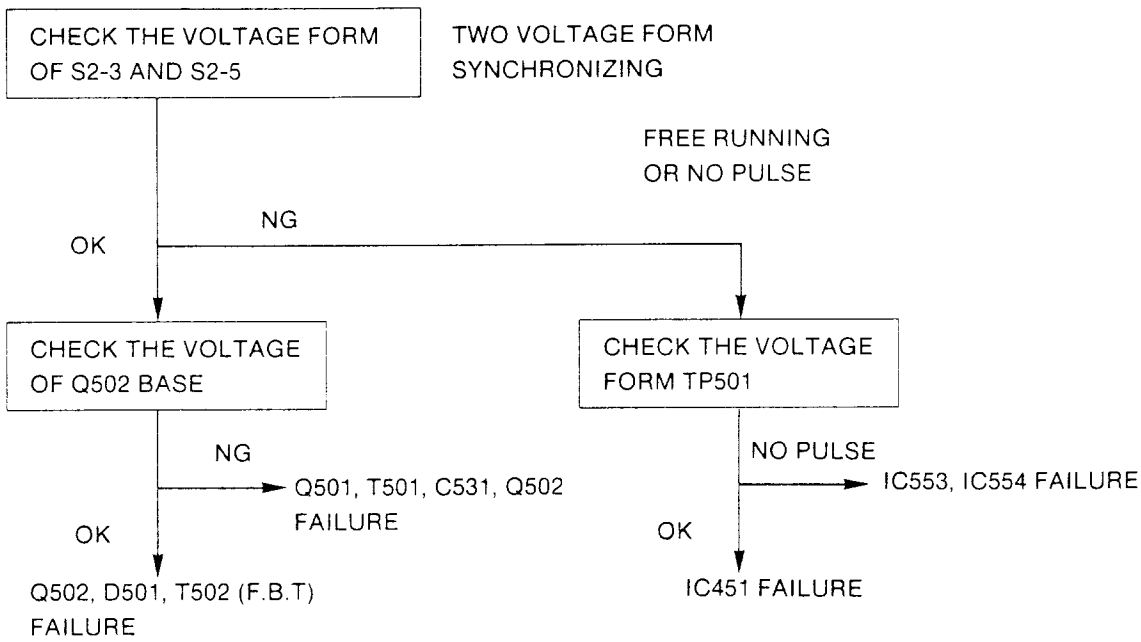
4. NO BLANKING WORKS

VISIBLE RETRACE LINE ON THE BACK RASTER

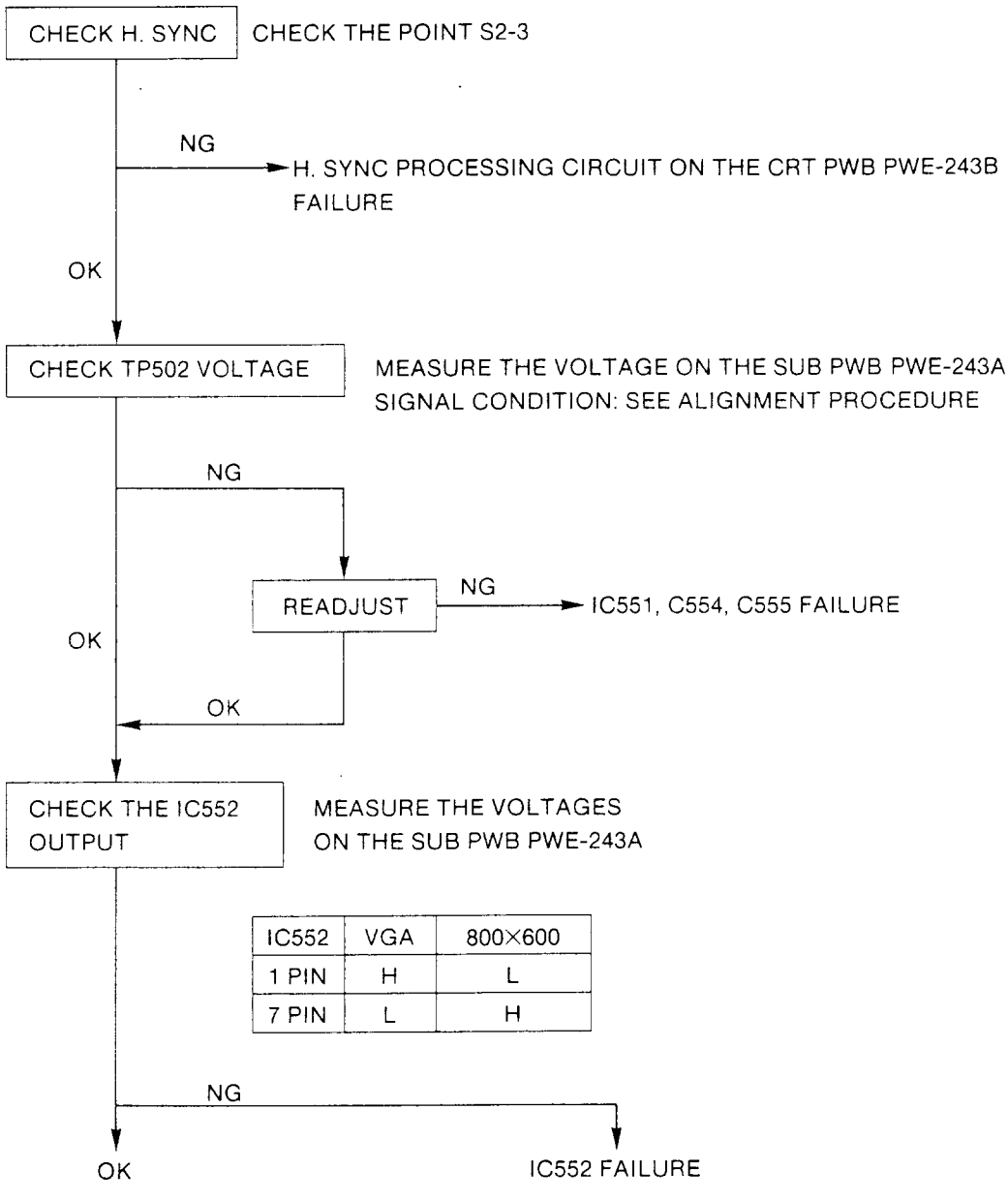


5. H. OSC/DEF/HV. CIRCUIT FAULT

NO RASTER
ABNORMAL PICTURE SIZE
ABNORMAL VIDEO ON THE CRT SCREEN



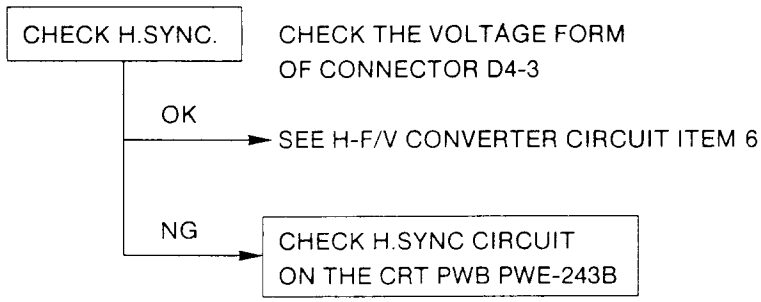
6. H-F/V CONVERTER AND ASSOCIATED CIRCUITRY



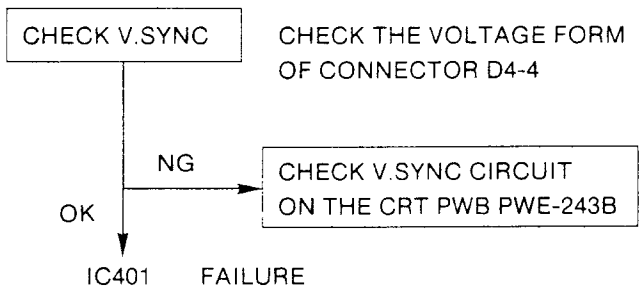
IC552	VGA	800×600
1 PIN	H	L
7 PIN	L	H

7. LACK OF STABLE SYNCHRONIZATION

- HORIZONTAL

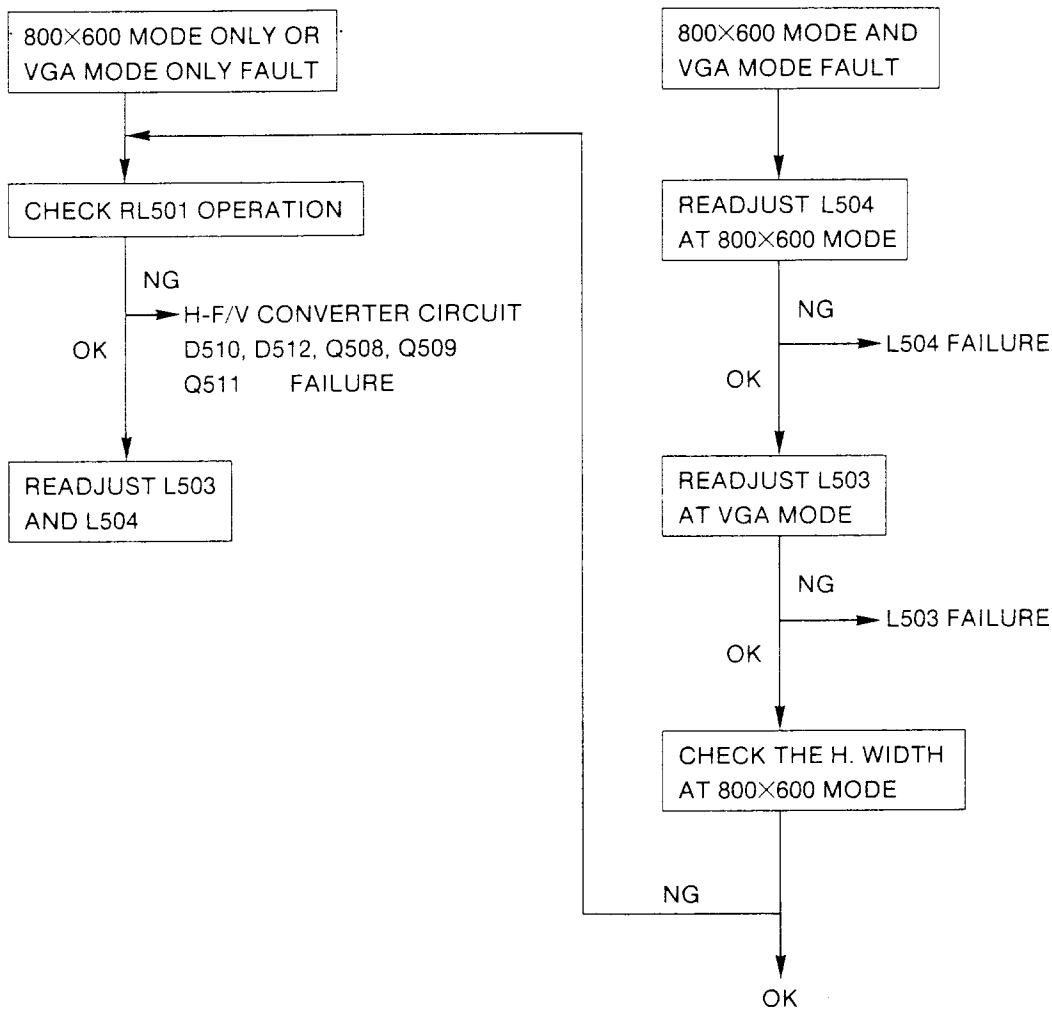


- VERTICAL



8. PICTURE SIZE

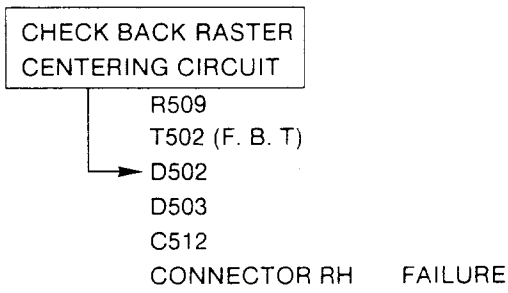
ABNORMAL HORIZONTAL WIDTH



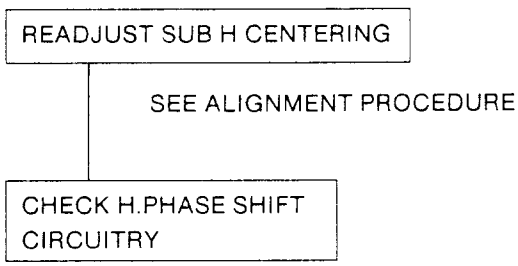
9. CENTERING

- HORIZONTAL

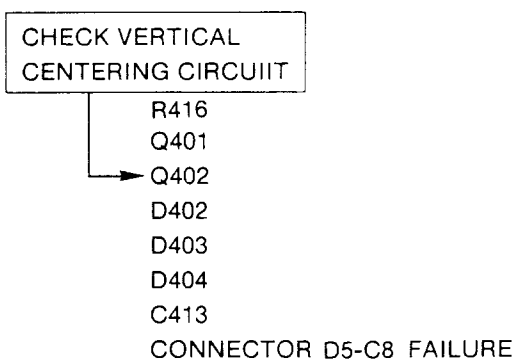
a) BACK RASTER CENTERING



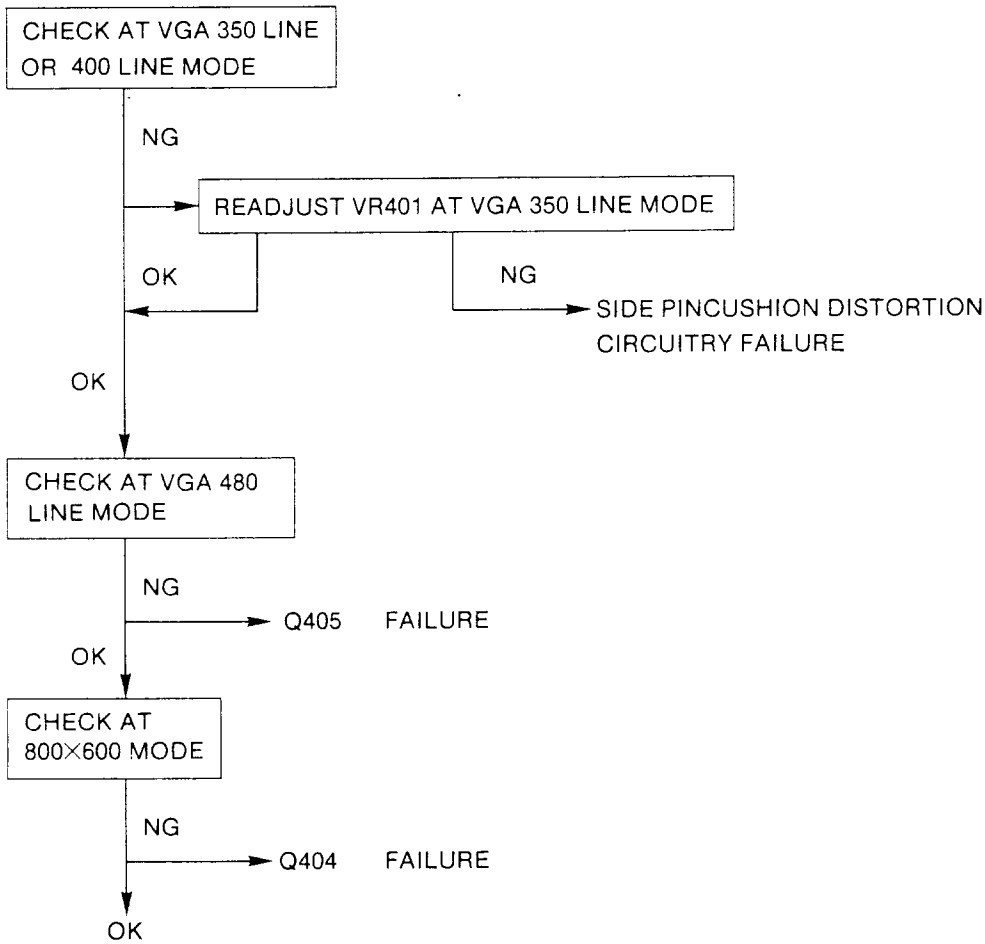
b) PICTURE CENTERING



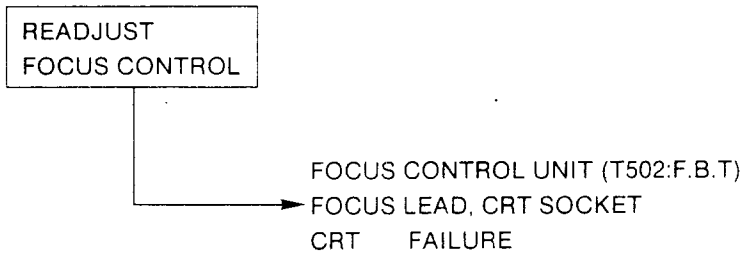
- VERTICAL



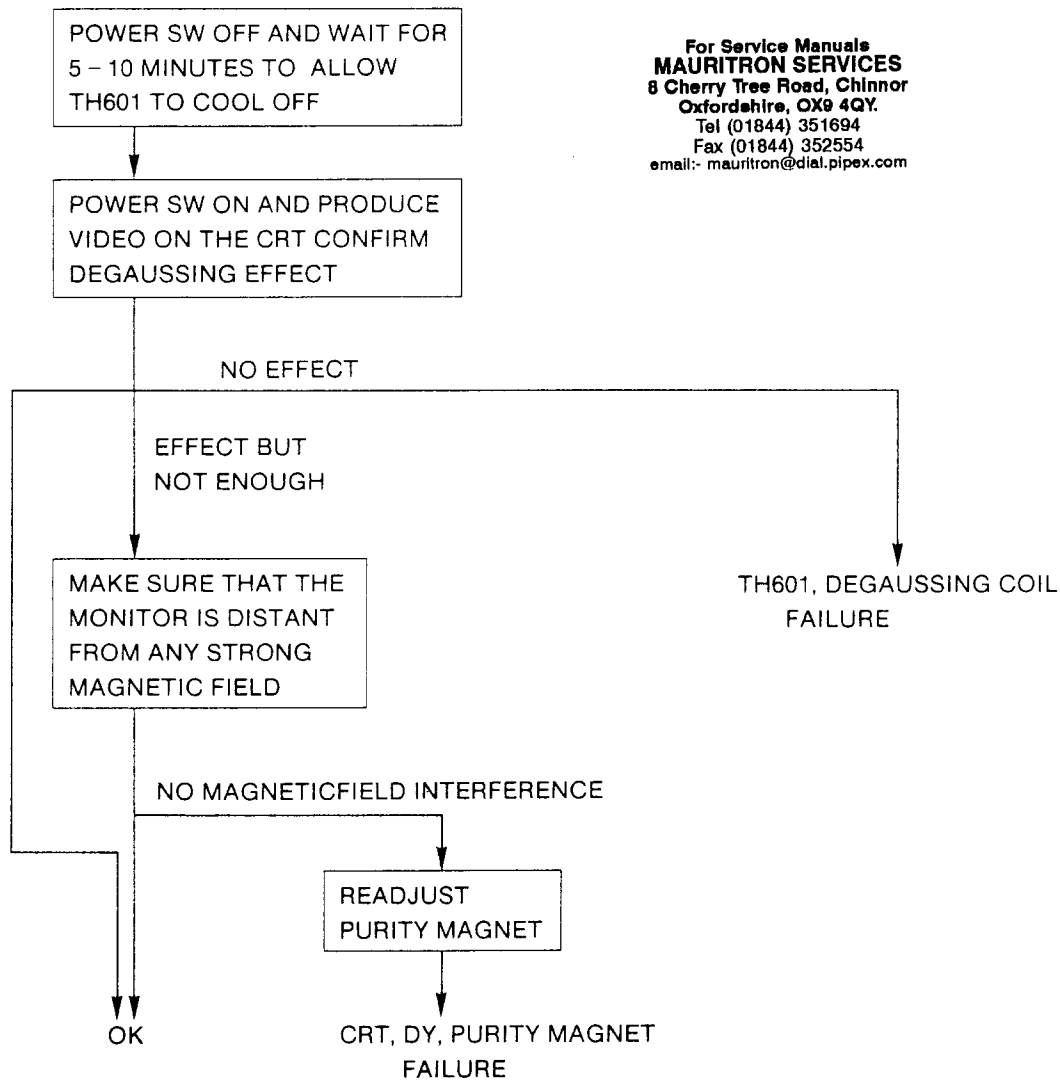
10. SIDE PINCUSHION DISTORTION FAILURE



11. POOR FOCUS



12. IMPURITY ON CRT SCREEN



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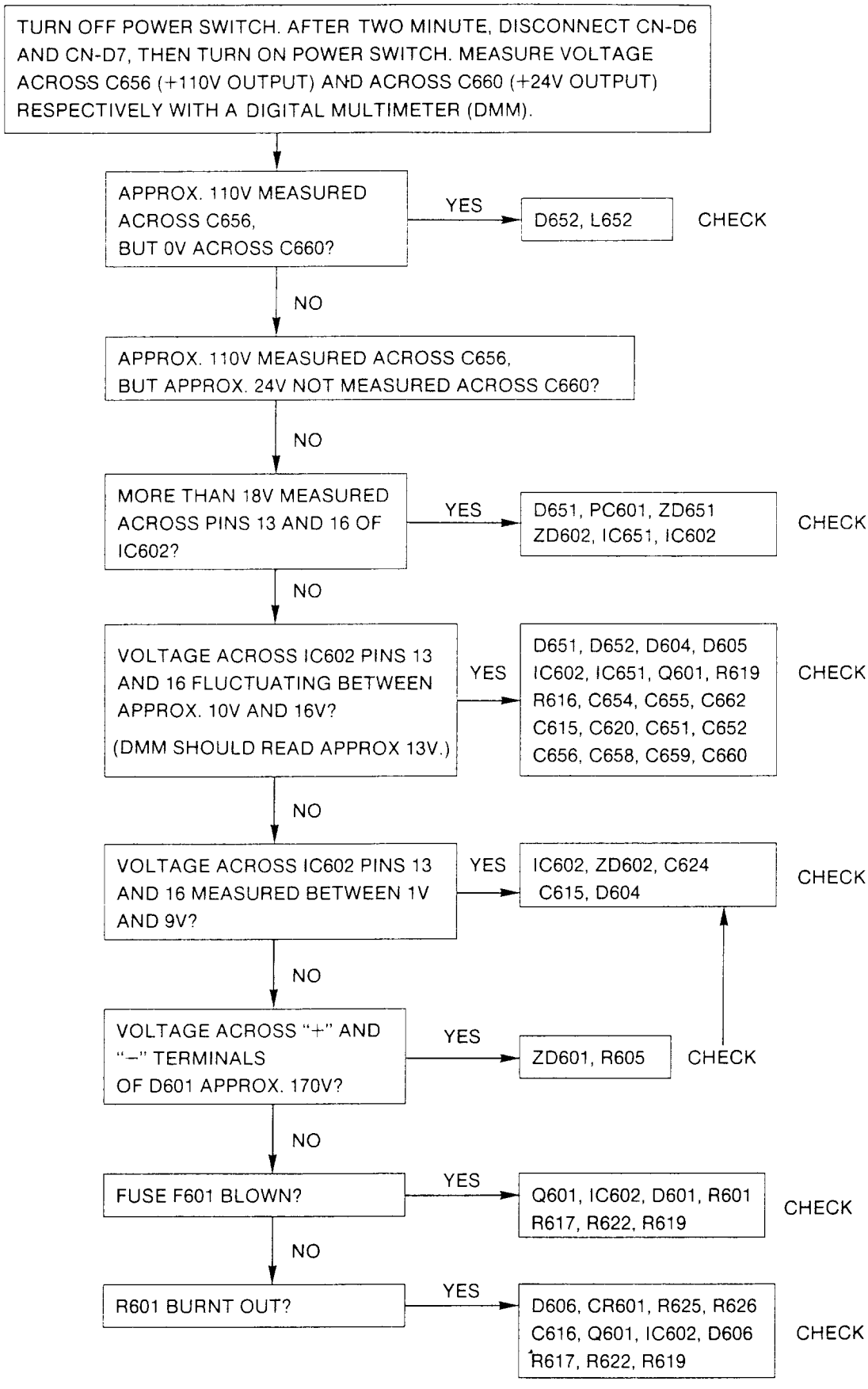
email:- mauritron@dial.pipex.com

13. SWITCHING REGULATOR CIRCUIT


TURN OFF POWER SWITCH. AFTER TWO MINUTE, DISCONNECT CN-D6 AND CN-D7, THEN TURN ON POWER SWITCH. MEASURE VOLTAGE ACROSS C656 (+110V OUTPUT) AND ACROSS C660 (+24V OUTPUT) RESPECTIVELY WITH A DIGITAL MULTIMETER (DMM).
APPROX. 110V MEASURED ACROSS C656, BUT 0V ACROSS C660?
YES
D652, L652
CHECK
NO
APPROX. 110V MEASURED ACROSS C656, BUT APPROX. 24V NOT MEASURED ACROSS C660?
NO
MORE THAN 18V MEASURED ACROSS PINS 13 AND 16 OF IC602?
YES
D651, PC601, ZD651 ZD602, IC651, IC602
CHECK
NO
VOLTAGE ACROSS IC602 PINS 13 AND 16 FLUCTUATING BETWEEN APPROX. 10V AND 16V?
(DMM SHOULD READ APPROX 13V.)
YES
D651, D652, D604, D605 IC602, IC651, Q601, R619 R616, C654, C655, C662 C615, C620, C651, C652 C656, C658, C659, C660
CHECK
NO
VOLTAGE ACROSS IC602 PINS 13 AND 16 MEASURED BETWEEN 1V AND 9V?
YES
IC602, ZD602, C624 C615, D604
CHECK
NO
VOLTAGE ACROSS "+" AND "−" TERMINALS OF D601 APPROX. 170V?
YES
ZD601, R605
CHECK
NO
FUSE F601 BLOWN?
YES
Q601, IC602, D601, R601 R617, R622, R619
CHECK
NO
R601 BURNT OUT?
YES
D606, CR601, R625, R626 C616, Q601, IC602, D606 R617, R622, R619
CHECK

CIRCUIT DESCRIPTION

1. Video System

1-1 Video amplifier circuit

The analog video RGB signals are input from pins 1, 2 and 3 of D-SUB 15-pin connector, and they are controlled by voltages at pins 4, 8, 12 and 14 of IC701. The video gain is adjusted with VR701 to VR703 so that 36Vp-p is obtained with Contrast control in MAX position, or 10Vp-p in MIN position when 0.7Vp-p is input.

1-2 Clamp circuit

The clamp circuit, which determines a black level of video signal, generates clamp pulses based on the H. SYNC. signal. The negative H. SYNC. signal is input to IC802 pin 11. Then, pulses of same phase are output from pin 9. The clamp pulses are input to IC701 pin 15.

1-3 Brightness and contrast control circuits

The brightness control varies G1 Grid voltage of CRT. Also, in order to attain white balance, it varies SUB BRIGHT terminals (pins 19, 24 and 29) of IC701. For the contrast, VR7A1 varies the base voltage of Q706, then the voltage of IC701 pin 14 varies. As a result, the video gain varies. The gain becomes larger as IC701 pin 14 voltage is higher.

1-4 Automatic brightness limiter (ABL) circuit

The ABL circuit works when CRT anode current exceeds about 300μA. when anode current is below 300μA, the voltage of CN-C5 pin 7 is clamped to 12.6V by D711. When anode current exceeds 300μA, the voltage of CN-C5 pin 7 drops. Then, Q708 and Q707 are turned on, and IC701 pin 14 potential drops. Consequently, the video output becomes smaller.

1-5 Blanking circuit

The blanking circuit eliminates horizontal and vertical retrace lines by lowering G1 voltage at the fly-back time.

1-6 100V regulation circuit

The 100V regulation circuit regulates DC110V, which is generated from the switching power supply, to 100V and it supplies 100V to the video output amplifier.

2. Deflection System

2-1 Synchronization discriminating circuit

The polarity of VGA sync. signal varies with the mode as shown below:

	H.SYNC	V.SYNC	Q806	Q807	Q808	Q809	Q810
VGA 350 LINES	POSI	NEGA	ON	OFF	OFF	ON	ON
VGA 400 LINES	NEGA	POSI	OFF	ON	ON	OFF	ON
VGA 480 LINES	NEGA	NEGA	OFF	OFF	ON	ON	OFF

The synchronization discriminating circuit generates the discrimination signal for control so that vertical display size and positive sync. signal become constant.

2-2 Horizontal system

2-2-1 F/V converter circuit

Horizontal sync. signal generated from the synchronization discriminating circuit is input to the F/V converter IC551 pin 2. The pulse determined by an external resistor and capacitor of pin 7 is output from pin 3, and it is converted into DC level by the RC integration.
The TP502 voltage is proportional to horizontal sync. signal frequency. The TP502 voltage is adjusted to 7.9V with VR551 when fh = 31.5 kHz. This voltage is input to the IC552 comparator to discriminate frequencies so that an oscillating capacitor, resonance capacitor, H. WIDTH coil, etc. can be switched over.

2-2-2 Horizontal oscillating circuit and HOLD circuit

The horizontal oscillating circuit consists of an IC451 and external resistor and capacitor. The IC451 contains VCO, AFC, X-ray protector and sync. separating circuit. The phase of pulse generated from horizontal sync. discriminating circuit is controlled by IC553, and it is input to IC451 pin 8. The oscillating circuit is an RC type, and its oscillation frequency is determined by an external resistor and capacitor of pin 13.
The H. HOLD is adjusted with VR556 when fh = 31.5 kHz.

2-2-3 H. POSITION control circuit

Horizontal display position is adjusted by shifting horizontal sync. signal to be input. Horizontal sync. signal is input to IC553 pin 11. The shift time is determined by the time constant of CR to be connected to pin 14. The shifted pulse is input to IC451 pin 8.
Adjustment is made according to the mode as follows:

VGA	VR552
800×600	VR553

2-2-4 H. DRIVE circuit

The horizontal pre-drive pulse output from IC451 pin 15 is input to Q501, then it passes through T501 to turn on a horizontal output transistor Q502.

2-2-5 H. OUTPUT circuit

The signal from T501 turns on and off a horizontal output transistor Q502. Consequently, a damper diode D501 and Q502 are turned on and off alternately so that the saw-tooth current flows into the horizontal deflection coil.
The fly-back transformer T502 boosts up the Q502 output to approximately 23.5kV at the time of cut off CRT anode current.

2-2-6 H. raster centering switching circuit

The raster position is controlled by superimposing DC current onto the deflection yoke current. This DC power is generated by rectifying and smoothing T502 (F.B.T) pulses. The inserting position and direction of connector RH switches over the shift amount and direction of raster.

2-2-7 High voltage protector circuit

The voltage of T502 pin 5 rises as high voltage becomes higher. The high voltage protector IC451 works to stop horizontal oscillation when the voltage of IC451 pin 16 exceeds approximately 0.72V (0.65 to 0.79V).

2-2-8 12V regulation circuit

The 12V regulation circuit regulates the power generated by rectifying the output pulses of T502 (F.B.T) to 12V and supplies it.

3. Vertical System

3-1 Vertical oscillation

Vertical free-run frequency is determined by an external resistor and capacitor of IC451 pins 5 and 6. Vertical oscillation occurs synchronously with sync. signal that has higher frequency than free-run frequency when that sync. signal is input to IC451 pin 7.

3-2 V. DRIVE, V. OUT

The IC401 contains a vertical drive, vertical out and pump-up circuits.
Output is generated from IC401 pin 2 and is sent as the vertical deflecting current to the V. DY.

3-3 Vercial centering

Vertical centering is controlled by superimposing DC current onto the deflection yoke current.

3-4 Side pin compensating circuit

The parabolic wave current generated at the V. DY is superimposed onto the horizontal deflecting current at T401. The amount of compensation is changed over according to the mode.

4. SW, REG Sections

4-1 Rectifying & smoothing circuit

AC input is rectified at D601. Then, it is smoothed at C608 and C609. The resultant DC voltage is supplied to the converter circuit.

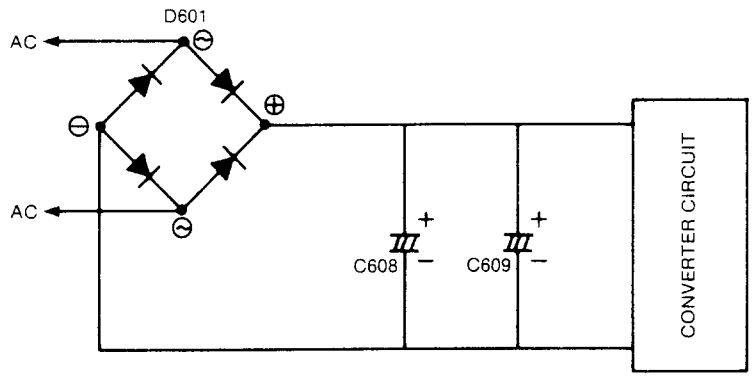


Fig. 1 Rectifying & Smoothing Circuit

4-2 Auxiliary power supply circuit

Auxiliary power supply circuit is to activate IC602. At the time of power on, charging current flows into the capacitors C615 and C624 via ZD601 and R605. Oscillation starts when the voltage of IC602 pin 16 reaches 17V through this charging operation.
After start of oscillation, the fly-back voltage of an auxiliary coil for the switching transformer is rectified and smoothed by D605 and C618, and its DC voltage is supplied to IC602.

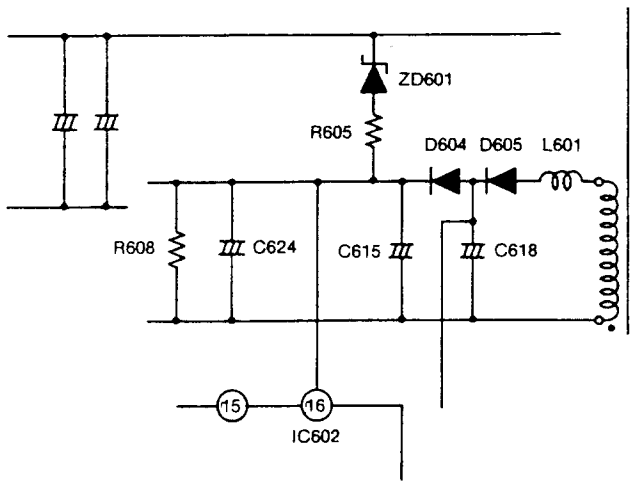


Fig. 2 Auxiliary Power Supply Circuit

4-3 Converter circuit

The converter circuit consists of a primary winding of the switching transformer T601 and a switch device Q601 and a surge absorber (C610, R606, C611, D603, and R607) that are connected in serial to the primary winding.
Input of ON-OFF signal from IC602 pin 2 into the gate of Q601 causes the drain-source to be turned on and off so that alternating voltage is applied to the primary winding of T601.

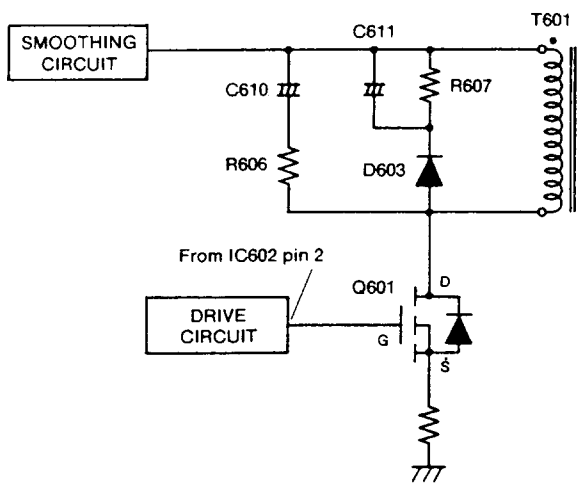


Fig. 3 Converter Circuit

4-4 Output smoothing circuit

The fly-back voltage generated at the secondary winding of switching transformer T601 is rectified by D651 and D652. Then, it is smoothed by C651, C652 and C658 so that DC current is obtained.
This fly-back voltage is maintained constant by controlling the ON duty of Q601 in the converter circuit.

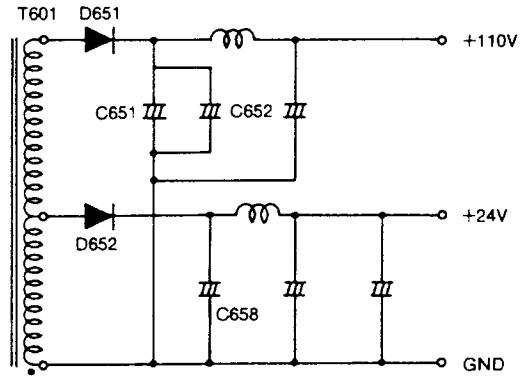


Fig. 4 Output Smoothing Circuit

4-5 Detection error amplifier circuit

The output voltage 110V is divided by resistors, and its voltage is compared to the reference voltage at the error amplifier IC651. An error is transmitted to the control circuit via a photocoupler PC601.

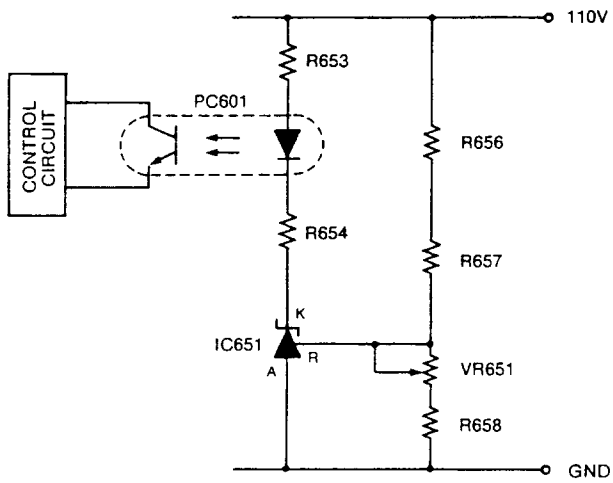


Fig. 5 Detection Error Amplifier Circuit

4-6 Oscillating circuit, control circuit and drive circuit

The oscillating, control, and drive circuits comprise mainly IC602.
The IC602 has a built-in oscillator of which frequency is determined by R614, C613 and R613 connected to pins 9, 10 and 11 respectively. In this circuit, horizontal sync. signal is input to pin 11 so that the oscillation cycle is synchronous with horizontal scanning cycle.
On the other hand, the output of detection error amplifier circuit is fed back to the control circuit from pin 8 via PC601 to control the duty of Q601 so that output voltage is kept constant.

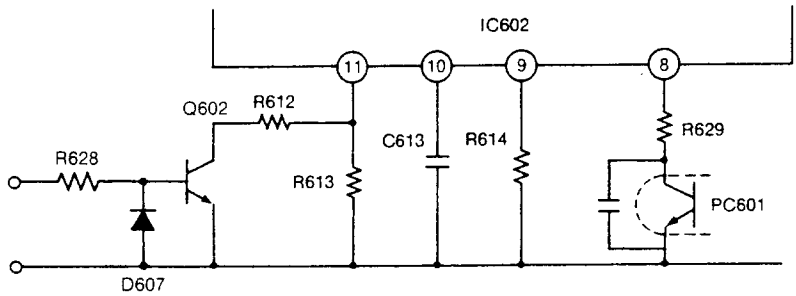


Fig. 6 Oscillating & Control Circuits

4-7 Overvoltage protection

The voltage of auxiliary winding rises proportionally to the output voltage if a fault occurs in the circuit and output voltage then rises.
That voltage is detected at IC602 pin 6, and the protection circuit built in the IC602 stops oscillation.

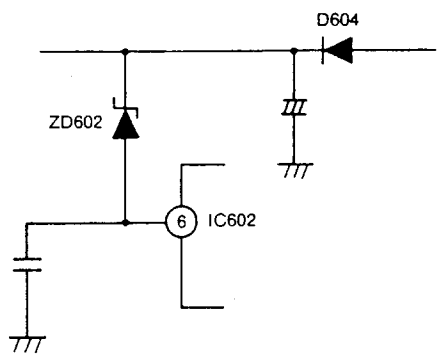


Fig. 7 Overvoltage Protection Circuit

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REPLACEMENT PARTS LIST

The components specified for Models JC-1403HME/EE/R.

Notes: 1. The components identified by △ mark are critical for safety. Replace only with parts Number specified.
2. Parts identified with ** are United King made parts.

SYMBOL	PARTS NO	DESCRIPTION
*** CRT & TUNER ***		
△CRT (JC-1403HME/EE)	33014156	CRT M34JUP23XX183 (1)
△ (JC-1403HMR)	33014157	CRT M34JUP23XX183 (1) (R)
*** ICS ***		
IC554	37051036	MOS UPD4066BC
IC801	37051100	MOS UPD4030BC(EX-OR)(ESD)
IC551	37056178	IC UPC1555C
IC552	37056204	IC UPC393C
IC402	37056207	IC UPC358
IC501	37056213	MOS TC4538BP
IC701	37056245	IC M51387P
△IC651	37056273	IC UPC1093J
△IC451	37056408	IC HA11423DP-18
IC401	37056423	IC UPC1498H
IC553 IC802	37056614	IC BU-4538B
△IC602	37056644	IC M51995P
*** TRANSISTORS ***		
Q512	350A0417	TR 2SA934-T Q
△Q602	350D7216	TR 2SC945-T P
Q451 Q457 Q504	350D7217	TR 2SC945-T Q
Q505 △Q507 Q705		
Q706 Q707 Q820		
Q402 △Q403	350E3212	TR,2SC2002-T L
Q712 Q713 Q714	350H5017	TR,2SC3811-TA Q
Q801 Q803 Q805		
Q818		
Q456 Q701 Q702	350K3517	TR 2SA733/2SA733A-T Q
Q703 Q704 Q708		
Q401	350K4412	TR,2SA952 L,AT
Q501	35056311	TR,2SC2688 K
△Q506	35063112	TR,2SD381 L
Q510	35063412	TR,2SD401A L
△Q502	35082401	TR 2SC3486-YB
Q709 Q710 Q711	35086004	TR,2SC3953-RA D
Q508	351G0500	TR,AN1A4M-T
Q452 Q453 Q509	351G0501	TR,AA1A4M-T
Q511 Q551 Q802		
Q804 Q806 Q807		
Q808 Q809 Q810		
Q821	351G0501	TR,AA1A4M-T
Q404 Q405 Q454	351G0531	TR AA1L4M-T
△Q503	35122000	TR 2SK762A
△Q601	35123700	TR 2SK1045
△CR601	35595015	TRIAC AC10FGM
*** DIODES ***		
D402 D403 D404	360K1027	DIODE 1SS132
D405 D406 D408		
D505 △D510 D512		
D520 D551 D553		
D554 D555 D558		
D560 D561 △D607		
D7A1 D701 D702		
D703 D704 D705		
D706 D707 D708		
D709 D710 D711		
D712 D722 D723		
D801 D802 D803		
D804 D805 D806		
D809 D810 D811		
D813 D814 D815		
D816		
D407 D508 D604	360K1032	DIODE 1SS82-TA
ZD702 ZD801	360K3098	DIODE RD12EB(3)-T4
△ZD501	360K3106	DIODE RD6.2EB(3)-T4
△ZD2001	360K3143	DIODE,RD8.2JSB(1)-T4
ZD502	360K3154	DIODE RD12EB(1)-T4
ZD401	360K3407	DIODE RD20JSB(1)/JSAB(1)
△ZD605	360K3635	DIODE RD5.1ESB(2)-T4
ZD552 ZD553	360K3672	DIODE RD12ESB(3)-T4
△ZD601	36003117	DIODE RD39EB(4)
ZD503 ZD504 ZD701	36003250	DIODE RD4.3FB(1)
ZD651	36003687	DIODE RD18ESB (2)
△ZD602	36003690	DIODE RD20ESB (1)
D2001 D401 △D502	361K7160	RECTIFIER,SI. TVR-06G G23
D503 D504 △D506		
D513 D516 D713		
△D605 △D606	361K7322	DIODE EL1Z-T
D516	36107160	RECTIFIER,SI. TVR-06G
△D603	36107174	RECTIFIER,SI. RU1P
△D652	36107511	RECTIFIER,SI. RL4Z,LFK2
△D651	36107512	RECTIFIER,SI. RG4C,LFK2
D501	36107581	DIODE ERD07-15 L
△D601	36108201	DIODE,NETWORK D5SBA60S
	36801023	DIODE,LIGHT-E SEL1320G
△D2002	38005025	VARISTOR KB-262
△TH601	38112031	THERMISTOR,POSITIVE
△PC601	38200233	IC TLP634(NHE-LF2)
*** TRANSFORMERS ***		
△T501	45803010	TRANS,H.DRIVE
△T601	46310807	SWITCHING TRANS W184
△T502	47105648	F.B.T.
△T401	47502042	TRANS,SIDE PINCUSHION
*** VARIABLE RESISTORS ***		
VR7A2	41011210	R,VARIABLE B1K-V
VR7A1	41011211	R,VARIABLE B10K-V
VR4A2	41011212	R,VARIABLE B20K-V
VR4A1	41011213	R,VARIABLE B500-V
VR5A1	41011214	R,VARIABLE B20K-V
VR452	41071154	R,VARIABLE B330
VR451	41071159	R,VARIABLE B2.2K

SYMBOL			PARTS NO	DESCRIPTION
VR710			41071160	R,VARIABLE B3.3K
VR556	VR701	VR702	41071161	R,VARIABLE B4.7K
VR703				
VR551	VR704	VR705	41071163	R,VARIABLE B10K
VR706				
VR552	VR553	VR707	41071165	R,VARIABLE B22K
VR708	VR709			
VR401			41085004	R,VARIABLE B500H
△VR501			41085055	R,VARIABLE B1K
△VR651			41505103	R,VARIABLE B500
△VR2001			41505105	R,VARIABLE B2K
*** RELAYS & SWITCHES ***				
			65260002	SWITCH,SEE-SAW
△RL501			65660013	RELAY VE 24HME-K
*** COILS & FILTERS ***				
△L503			60908069	WIDTH COIL W239 2-3
△L504			60908071	WIDTH COIL W240 2-3
△L505			60919601	COIL,LIN.
L506			60999004	COIL,CHOKE
L701	L702	L703	610E1709	COIL,FILTER 2.2UH
L704	L705	L706		
L451			610E1729	COIL,FILTER 100UH
L767	L768	L769	610F6014	COIL,FILTER 5.6UH
L501			610F7010	COIL,FILTER 2.7UH
LC706	LC707		610G2962	EMI FILTER 471BTL-EMT
△L601			61051723	COIL,FILTER 33UH
			61062076	POWER LINE FILTER
FL601			61062200	LINE FILTER
L507			61064006	COIL,FILTER 50UH
△L602			61065002	FERRITE BEADS
L508			61067610	COIL,FILTER
L651			61099013	COIL,CHOKE 10UH
L652			61099014	COIL,CHOKE 33UH
L502			61099019	COIL,CHOKE
△L603			61099044	SHIELDING COIL 222K
DEG			**61314215	COIL,DEGAUSSING
L711			616K5058	FERRITE BEADS
LC703	LC704	LC705	616K6062	NOISE FILTER ZJSC-R40-820
LC701	LC702		61606021	NOISE FILTER DSS-271M
LC708			61606027	NOISE FILTER 2A222M
*** PWB ASSYS ***				
			84K59C06	SUB PWB ASSY
			84K72F07	MAIN PWB ASSY
*** ELECTRICAL PARTS & MISCELLANEOUS PARTS ***				
HS401			31709202	SHEET,INSULATOR
HS501			31709503	SHEET,INSULATOR
SG701	SG702	SG703	32990047	ARRESTER
SG704				
F602			66699007	FUSE ET T2A,250V-S,B SOC
SG705			66706002	SPARK GAP 1.5KV
△			70032026	SG/CRT SOCKET

SYMBOL			PARTS NO	DESCRIPTION
	(JC-1403HME)		70800039	LINE CORD
	(JC-1403HMEE)		70800323	LINE, POWER
	(JC-1403HMR)		75513032	LINE CORD
			71205037	HOLDER, FUSE
CNRH			73721003	CONNECTOR PIN 2P
			**73893054	CABLE, SIGNAL (15PD-EH) K
*** APPEARANCE PARTS ***				
			24514792	COIL SPRING
			**25310032	CABINET BACK ASSY
			**25310061	CABINET FRONT ASSY
			**25409732	REVOLVING STAND ASSY
			**25409751	SPINDLE
			**25310093	CABINET BOTTOM
			**25757643	LAVEL (REV.)
	(JC-1403HME)		**25768562	NAME PLATE, INSTRUCTION
	(JC-1403HMEE)		**25769152	NAME PLATE, INSTRUCTION
	(JC-1403HMR)		25769162	NAME PLATE, INSTRUCTION
*** KNOBS & PUSH BUTTONS ***				
			25452771	KNOB,CONTROL
			25452791	KNOB,SLIDE
*** PRINTED & PACKING MATERIALS ***				
	(JC-1403HME/R)		24813191	BAG, POLYETHYLENE (150*370)
	(JC-1403HME/EE)		25815061	BAG, POLYETHYLENE (270*370)
	(JC-1403HMEE)		24813501	BAG, POLYETHYLENE
	(JC-1403HMR)		24806961	BAG, POLYETHYLENE (270*370)
	(JC-1403HME/R)		25804551	BAG, POLYETHYLENE (150*230)
			**25816341	FILLER, CARTON (T)
			**25816351	FILLER (B) CARTON
	(JC-1403HME)		**25816981	CARTON BOX
	(JC-1403HMEE)		**25817431	CARTON BOX
	(JC-1403HMR)		25817441	CARTON BOX
			**78121665	INSTRUCTION BOOK
	(JC-1403HMR)		70843392	WARRANTY CARD
			**78034403	MONITOR SALES OFFICE LIST
*** RESISTORS ***				
△R616			401C6625	R,CARBON 10H 5% 1/4W
R420			401C6649	R,CARBON 100H 5% 1/4W
R743	R744	R745	401C6651	R,CARBON 120H 5% 1/4W
R565			401C6667	R,CARBON 560H 5% 1/4W
R563			401C6673	R,CARBON 1.0K 5% 1/4W
△R624			401C6677	R,CARBON 1.5K 5% 1/4W
R569			401C6683	R,CARBON 2.7K 5% 1/4W
R508			401C6685	R,CARBON 3.3K 5% 1/4W
R559			401C6761	R,CARBON 4.7M 5% 1/4W
R507			401H5623	R,CARBON 8.2H 5% 1/2W
R758	R759	R760	401H5649	R,CARBON 100H 5% 1/2W
R765				
R451			401H5657	R,CARBON 220H 5% 1/2W

SYMBOL	PARTS NO	DESCRIPTION
R413	401H5659	R,CARBON 270H 5% 1/2W
R5A2	401H5663	R,CARBON 390H 5% 1/2W
△ R537	401H5665	R,CARBON 470H 5% 1/2W
△ R535	401H5667	R,CARBON 560H 5% 1/2W
△ R536	401H5669	R,CARBON 680H 5% 1/2W
R666	401H5681	R,CARBON 2.2K 5% 1/2W
R503 R761	401H5689	R,CARBON 4.7K 5% 1/2W
△ R621	401H5721	R,CARBON 100K 5% 1/2W
R504	401K5605	R,CARBON 1.5H 5% 1/6W
R746 R747 R748	401K5639	R,CARBON 39H 5% 1/6W
R462	401K5641	R,CARBON 47H 5% 1/6W
R460 R461	401K5649	R,CARBON 100H 5% 1/6W
R740 R741 R742	401K5653	R,CARBON 150H 5% 1/6W
R704 R705 R706	401K5657	R,CARBON 220H 5% 1/6W
R502 △ R629 R710	401K5665	R,CARBON 470H 5% 1/6W
R711 R712 R770		
R469A	401K5667	R,CARBON 560H 5% 1/6W
R467A R468A	401K5669	R,CARBON 680H 5% 1/6W
R431 R459 R473	401K5673	R,CARBON 1.0K 5% 1/6W
△ R525 R560 R572		
R574 △ R602 R729		
R730 R736 R738		
R739 R766 R845		
R846		
△ R528	401K5675	R,CARBON 1.2K 5% 1/6W
R501 R543 R818	401K5677	R,CARBON 1.5K 5% 1/6W
R819 R820		
R423 R471	401K5679	R,CARBON 1.8K 5% 1/6W
R427 R472 R524	401K5681	R,CARBON 2.2K 5% 1/6W
R533 △ R654 R731		
R817 R835 R842		
R424 R425 R530	401K5683	R,CARBON 2.7K 5% 1/6W
R618 R735 R737		
△ R2002 R426 △ R526	401K5685	R,CARBON 3.3K 5% 1/6W
△ R628 △ R655 △ R665		
R7A2 R707 R708		
R709 R755 R756		
R757 R803 R805		
R418 R520 △ R527	401K5687	R,CARBON 3.9K 5% 1/6W
R409 R410 R463	401K5689	R,CARBON 4.7K 5% 1/6W
R475 R553 R567		
R719 R720 R721	401K5689	R,CARBON 4.7K 5% 1/6W
R801 R802		
R428 R521 R562	401K5691	R,CARBON 5.6K 5% 1/6W
R564 R810 R840		
R456 R566 R816	401K5693	R,CARBON 6.8K 5% 1/6W
R454 R510 R518	401K5695	R,CARBON 8.2K 5% 1/6W
R551 R734 R833		
R834		
R2003 R403 R404	401K5697	R,CARBON 10K 5% 1/6W
R405 R406 R407		
R411 R474 R5A4		
R552 R555 R556		
R627 R804 R806		
R808 R809 R811		
R812 R815		
△ R2001 R455	401K5699	R,CARBON 12K 5% 1/6W
R7A1 R807 R814	401K5701	R,CARBON 15K 5% 1/6W

SYMBOL	PARTS NO	DESCRIPTION
R402 R457 △ R652	401K5703	R,CARBON 18K 5% 1/6W
R728		
R412 R419 R422	401K5705	R,CARBON 22K 5% 1/6W
R464 R554 R568		
R561	401K5707	R,CARBON 27K 5% 1/6W
R417 R532 △ R608	401K5709	R,CARBON 33K 5% 1/6W
R713 R714 R715		
R458 R476 R541	401K5711	R,CARBON 39K 5% 1/6W
R531	401K5713	R,CARBON 47K 5% 1/6W
R477 R515	401K5721	R,CARBON 100K 5% 1/6W
R516	401K5731	R,CARBON 270K 5% 1/6W
R523	401K5733	R,CARBON 330K 5% 1/6W
R522 R771	401K5745	R,CARBON 1.0M 5% 1/6W
△ R509 △ R514 △ R529	40175109	R,CARBON 2.2H 5% 1/4W
△ R538 △ R626		
R416	40175133	R,CARBON 22H 5% 1/4W
△ R617	40175139	R,CARBON 39H 5% 1/4W
△ R622	40175141	R,CARBON 47H 5% 1/4W
R542	40175169	R,CARBON 680H 5% 1/4W
△ R601	40299107	R,WIRE 15H 10% 5W
R511 △ R659	40371135	R,METAL 27H 5% 1W
R512	40371143	R,METAL 56H 5% 1W
R5A3	40371169	R,METAL 680H 5% 1W
R401	40372105	R,METAL 1.5H 5% 2W
△ R513	40372108	R,METAL 2.0H 5% 2W
△ R6A1	40372109	R,METAL 2.2H 5% 2W
△ R651	40372131	R,METAL 18H 5% 2W
△ R625	40372147	R,METAL 82H 5% 2W
△ R606	40372149	R,METAL 100H 5% 2W
R415	40372157	R,METAL 220H 5% 2W
R570	40372161	R,METAL 330H 5% 2W
△ R653	40372203	R,METAL 18K 5% 2W
△ R607	40372221	R,METAL 100K 5% 2W
R505 R506	40373171	R,METAL 820H 5% 3W
△ R605	40373221	R,METAL 100K 5% 3W
△ R619	40373329	R,METAL 0.22H 5% 3W
R749 R750 R751	40399043	RS3PB680HJ,20D(26)
R752 R753 R754	40399044	RS3PB820HJ,20D(26)
R701 R702 R703	404C1646	R,METAL 75H 1% 1/6W
R716 R717 R718	404C1673	R,METAL 1.0K 1% 1/6W
R722 R723 R724		
R732	404C1675	R,METAL 1.2K 1% 1/6W
R466	404C1677	R,METAL 1.5K 1% 1/6W
R469 △ R612	404C1681	R,METAL 2.2K 1% 1/6W
△ R658	404C1683	R,METAL 2.7K 1% 1/6W
R465 R468	404C1685	R,METAL 3.3K 1% 1/6W
R733	404C1689	R,METAL 4.7K 1% 1/6W
R467	404C1697	R,METAL 10K 1% 1/6W
△ R613	404C1705	R,METAL 22K 1% 1/6W
R453	404C1709	R,METAL 33K 1% 1/6W
R452	404C1711	R,METAL 39K 1% 1/6W
△ R614	404C1712	R,METAL 43K 1% 1/6W
△ R657	404C1715	R,METAL 56K 1% 1/6W
△ R656	404C1717	R,METAL 68K 1% 1/6W
R557	404C1723	R,METAL 120K 1% 1/6W

SYMBOL	PARTS NO	DESCRIPTION
R558	404C1731	R,METAL 270K 1% 1/6W
△R615	40405125	R,METAL 10H 5% 1/4W
*** CAPACITORS ***		
C535	420C9554	C,CERAMIC 500V 180PF
△C530	420C9556	C,CERAMIC 500V 270PF
C514	420C9558	C,CERAMIC 500V 390PF
C501 △C508	420C9560	C,CERAMIC 500V 560PF
△C509 △C510	420C9562	C,CERAMIC 500V 820PF
C502	4201J575	C,CERAMIC 500V 0.01UF
C727	42019175	C,CERAMIC 2KV 0.01UF
C730 C731 C732	4203J571	C,CERAMIC 500V 4700PF
△C603 △C604 △C617	42053013	C,CERAMIC 400V 1000PF
△C626 △C653 △C663	42099085	C,CERAMIC 2KV 560PF
△C657	42099086	C,CERAMIC 2KV 1000PF
C610	42099088	C,CERAMIC 2KV 220PF
C553 C566 C704	421A0425	C,CERAMIC 50V 0.01UF
C705 C706 C710		
C715 C716		
C740	421C0208	C,CERAMIC 50V 390PF
C455	421C0213	C,CERAMIC 50V 1000PF
C751 C752	421C0701	C,CERAMIC 50V 100PF
C803	421C3242	C,CERAMIC 50V 270PF
C516 C529 C570	421C3479	C,CERAMIC 50V 0.1UF
C576 C810		
C405 C507 C571	421J9001	C,CERAMIC 50V 0.1UF
C7A1	421J9035	C,CERAMIC 16V 0.1UF
C711 C712 C713	421J9036	C,CERAMIC 25V 0.1UF
C714 C717 C721		
C722 C723 C728		
C811		
C411	423A1033	C,CERAMIC 50V 33PF
C724 C725 C726	423A1049	C,CERAMIC 50V 150PF
C408	423A1051	C,CERAMIC 50V 180PF
C523	423A1053	C,CERAMIC 50V 220PF
C557	423A1055	C,CERAMIC 50V 270PF
C551	423A1101	C,CERAMIC 50V 470PF
C522	423A2104	C,CERAMIC 50V 220PF
C556	423A2105	C,CERAMIC 50V 270PF
C559	4239J016	C,CERAMIC 50V 390PF
C552	427A7005	C,FILM 100V 0.0022UF
C453	427F4005	C,FILM 50V 2200PF
C533	427F4013	C,FILM 50V 0.01UF
C562 C563	427F4015	C,FILM 50V 0.015UF
C416 C558 C564	427F4021	C,FILM 50V 0.047UF
C801	427F4022	C,FILM 50V 0.056UF
C414	427F4059	C,FILM 50V 4700PF
C461	427F4060	C,FILM 50V 5600PF
△C619 △C623	427F4063	C,FILM 50V 0.01UF
C409	427F4064	C,FILM 50V 0.012UF
△C620	427F4071	C,FILM 50V 0.047UF
△C655	427F4073	C,FILM 50V 0.068UF
C532 △C621	427F4075	C,FILM 50V 0.1UF
△C504	42703863	C,MYLAR 400V 0.01UF
C517	42754163	C,FILM 100V 0.01UF

SYMBOL	PARTS NO	DESCRIPTION
△C560	42799039	C,FILM 100V 3300PF
△C611	42799099	C,MYLAR 400V 0.033UF
△C605	42883013	C,METAL FILM 50V 0.1UF
C418	42883017	C,CERAMIC 50V 0.22UF
△C505	42807513	C,METAL FILM 1.6K 3300PF
△C503	42807591	C,METAL 1600V 2900PF
C451	4282C025	C,METAL FILM 50V 1UF
△C602	42824325	C,FILM 250V 0.1UF
C534 △C654	42839022	C,METAL FILM 250V 0.1UF
△C662	42840081	C,METAL 250V 0.01UF
△C613	42842003	C,METAL 50V 1000PF
△C511	42843506	C,METAL 400V 0.6UF
△C601	42899097	C,METAL 250V 0.47UF
C574	430B3071	C,ELEC 25V 220UF
△C518	430B3109	C,ELEC 50V 47UF
C733 C735	430B3182	C,ELEC 160V 1UF
C569	430B5051	C,ELEC 16V 220UF
C454 C701 C702	430B5069	C,ELEC 25V 47UF
C703		
C707 C708 C709	430B5103	C,ELEC 50V 2.2UF
△C519	430B5106	C,ELEC 50V 10UF
△C2002	430B6015	C,ELEC 10V 47UF
C512	430B6017	C,ELEC 10V 220UF
C567	430B6030	C,ELEC 16V 220UF
C458	430B6031	C,ELEC 16V 330UF
C718 C720 C729	430B6041	C,ELEC 25V 47UF,
C809		
△C520	430B6043	C,ELEC 25V 220UF
C413	430B6054	C,ELEC 35V 100UF
C565	430B6055	C,ELEC 35V 220UF
C602	430B6060	C,ELEC 50V 0.47UF
C452	430B6061	C,ELEC 50V 1UF
C404	430B6065	C,ELEC 50V 10UF
C403	430B6066	C,ELEC 50V 22UF
C2001	430B6068	C,ELEC 50V 47UF
C531	430B6071	C,ELEC 50V 330UF
C415	430B9039	C,ELEC 25V 22UF
C615	430B9053	C,ELEC 35V 47UF
C412	430B9054	C,ELEC 35V 100UF
C406	430B9055	C,ELEC 35V 220UF
C419 △C658	430B9057	C,ELEC 35V 470UF
△C624	430B9065	C,ELEC 50V 10UF
C513	430B9068	C,ELEC 50V 47UF
C524 C525 C526	430B9517	C,ELEC 160V 22UF
C734		
C506	4302C190	C,ELEC 160V 100UF
C401 △C521	4302F058	C,ELEC 35V 1000UF
△C616	4302J067	C,ELEC 50V 33UF
△C659 △C660	4304A002	C,ELEC 35V 100UF
△C618	4304A009	C,ELEC 35V 1UF
△C656	4304A010	C,ELEC 160V 47UF
△C651 △C652	4304A013	C,ELEC 160V 100UF
△C608 △C609	43199081	C,ELEC 400V 180UF(22X50)
C457 C719	433A3043	C,ELEC 35V 4.7UF
C554 C555	435A8254	C,TANTLM 25V 3.3UF

SYMBOL	PARTS NO	DESCRIPTION
C561	435A8307	C.TANTALM 35V 1UF
C456	43515063	C.TANTALUM 25V 6.8UF

REPLACEMENT PARTS LIST

The components specified for Model JC-1403HMED.

Notes: 1. The components identified by △ mark are critical for safety. Replace only with parts Number specified.
2. Parts identified with ** are United King made parts.

SYMBOL	PARTS NO	DESCRIPTION
*** CRT & TUNER ***		
△CRT	33014156	CRT M34JUP23XX183 (1)
*** ICS ***		
IC554	37051036	MOS UPD4066BC
IC801	37051100	MOS UPD4030BC(EX-OR)(ESD)
IC551	37056178	IC UPC1555C
IC552	37056204	IC UPC393C
IC402	37056207	IC UPC358
IC501	37056213	MOS TC4538BP
IC701	37056245	IC M51387P
△IC651	37056273	IC UPC1093J
△IC451	37056408	IC HA11423DP-18
IC401	37056423	IC UPC1498H
IC553 IC802	37056614	IC BU-4538B
△IC602	37056644	IC M51995P
*** TRANSISTORS ***		
Q512	350A0417	TR 2SA934-T Q
△Q602	350D7216	TR 2SC945-T P
Q451 Q457 Q504	350D7217	TR 2SC945-T Q
Q505 △Q507 Q705		
Q706 Q707 Q820		
Q402 △Q403	350E3212	TR,2SC2002-T L
Q712 Q713 Q714	350H5017	TR,2SC3811-TA Q
Q801 Q803 Q805		
Q818		
Q456 Q701 Q702	350K3517	TR 2SA733/2SA733A-T Q
Q703 Q704 Q708		
Q401	350K4412	TR,2SA952 L,AT
Q501	35056311	TR,2SC2688 K
△Q506	35063112	TR,2SD381 L
Q510	35063412	TR,2SD401A L
Q502	35082401	TR 2SC3486-YB
Q709 Q710 Q711	35086004	TR,2SC3953-RA D
Q508	351G0500	TR,AN1A4M-T
Q452 Q453 Q509	351G0501	TR,AA1A4M-T
Q511 Q551 Q802		
Q804 Q806 Q807		
Q808 Q809 Q810		
Q821	351G0501	TR,AA1A4M-T
Q404 Q405 Q454	351G0531	TR AA1L4M-T
△Q503	35122000	TR 2SK762A
△Q601	35123700	TR 2SK1045
△CR601	35595015	TRIAC AC10FGM
*** DIODES ***		
D402 D403 D404 D405 D406 D408 D505 △D510 D512	360K1027	DIODE 1SS132

SYMBOL	PARTS NO	DESCRIPTION
D520 D551 D553 D554 D555 D558 D560 D561 △D607 D7A1 D701 D702 D703 D704 D705 D706 D707 D708 D709 D710 D711 D712 D722 D723 D801 D802 D803 D804 D805 D806 D809 D810 D811 D813 D814 D815 D816		
D407 D508 D604	360K1032	DIODE 1SS82-TA
ZD702 ZD801	360K3098	DIODE RD12EB(3)-T4
△ZD501	360K3106	DIODE RD6.2EB(3)-T4
△ZD2001	360K3143	DIODE,RD8.2JSB(1)-T4
ZD502	360K3154	DIODE RD12EB(1)-T4
ZD401	360K3407	DIODE RD20JSB(1)/JSAB(1)
△ZD605	360K3635	DIODE RD5.1ESB(2)-T4
ZD551 ZD552 ZD553	360K3672	DIODE RD12ESB(3)-T4
ZD601	36003117	DIODE RD39EB(4)
ZD503 ZD504 ZD701	36003250	DIODE RD4.3FB(1)
ZD651	36003687	DIODE RD18ESB,(2)
△ZD602	36003690	DIODE RD20ESB (1)
D2001 D401 △D502	361K7160	RECTIFIER,SI. TVR-06G G23
D503 D504 △D506 D513 D516 D713		
△D605 △D606	361K7322	DIODE EL1Z-T
D516	36107160	RECTIFIER,SI. TVR-06G
△D603	36107174	RECTIFIER,SI. RU1P
△D652	36107511	RECTIFIER,SI. RL4Z,LFK2
D651	36107512	RECTIFIER,SI. RG4C,LFK2
D501	36107581	DIODE ERD07-15 L
△D601	36108201	DIODE,NETWORK D5SBA60S
	36801023	DIODE,LIGHT-E SEL1320G
△D2002	38005025	VARISTOR KB-262
△TH601	38112031	THERMISTOR,POSITIVE
△PC601	38200233	IC TLP634(NHE-LF2)
*** TRANSFORMERS ***		
T501	45803010	TRANS,H.DRIVE
△T601	46310807	SWITCHING TRANS W184
△T502	47105648	F.B.T.
△T401	47502042	TRANS,SIDE PINCUSHION
*** VARIABLE RESISTORS ***		
VR7A2	41011210	R,VARIABLE B1K-V
VR7A1	41011211	R,VARIABLE B10K-V
VR4A2	41011212	R,VARIABLE B20K-V
VR4A1	41011213	R,VARIABLE B500-V
VR5A1	41011214	R,VARIABLE B20K-V

SYMBOL			PARTS NO	DESCRIPTION
VR452			41071154	R,VARIABLE B330
VR451			41071159	R,VARIABLE B2.2K
VR710			41071160	R,VARIABLE B3.3K
VR556	VR701	VR702	41071161	R,VARIABLE B4.7K
VR703				
VR551	VR704	VR705	41071163	R,VARIABLE B10K
VR706				
VR552	VR553	VR707	41071165	R,VARIABLE B22K
VR708	VR709			
VR401			41085004	R,VARIABLE B500H
△VR501			41085055	R,VARIABLE B1K
△VR651			41505103	R,VARIABLE B500
△VR2001			41505105	R,VARIABLE B2K

*** RELAYS & SWITCHES ***

	65260002	SWITCH,SEE-SAW	
△RL501	65660013	RELAY VE 24HME-K	

*** COILS & FILTERS ***

△L503			60908069	WIDTH COIL W239 2-3
△L504			60908071	WIDTH COIL W240 2-3
L505			60919601	COIL,LIN.
L506			60999004	COIL,CHOKE
L701	L702	L703	610E1709	COIL,FILTER 2.2UH
L704	L705	L706		
L451			610E1729	COIL,FILTER 100UH
L767	L768	L769	610F6014	COIL,FILTER 5.6UH
L501			610F7010	COIL,FILTER 2.7UH
LC706	LC707		610G2962	EMI FILTER 471BTL-EMT
△L601			61051723	COIL,FILTER 33UH
			61062076	POWER LINE FILTER
FL601			61062200	LINE FILTER
L507			61064006	COIL,FILTER 50UH
L602			61065002	FERRITE BEADS
L508			61067610	COIL,FILTER
△L651			61099013	COIL,CHOKE 10UH
L652			61099014	COIL,CHOKE 33UH
L502			61099019	COIL,CHOKE
△L603			61099044	SHIELDING COIL 222K
DEG			**61314215	COIL,DEGAUSSING
L711			616K5058	FERRITE BEADS
LC703	LC704	LC705	616K6062	NOISE FILTER ZJSC-R40-820
LC701	LC702		61606021	NOISE FILTER DSS-271M
LC708			61606027	NOISE FILTER 2A222M

*** PWB ASSYS ***

	84K72F07	MAIN PWB ASSY
	84K93C04	SUB PWB ASSY

*** ELECTRICAL PARTS & MISCELLANEOUS PARTS ***

HS401			31709202	SHEET,INSULATOR
HS501			31709503	SHEET,INSULATOR
SG701	SG702	SG703	32990047	ARRESTER
SG704				
F602			66699007	FUSE ET T2A,250V-S,B SOC

SYMBOL			PARTS NO	DESCRIPTION
SG705			66706002	SPARK GAP 1.5KV
			73893071	CABLE,SIGNAL 2095 GRY
△			70032026	SG/CRT SOCKET
			70800039	LINE CORD
			71205037	HOLDER,FUSE
CNRH			73721003	CONNECTOR PIN 2P

*** APPEARANCE PARTS ***

	24514792	COIL SPRING
	**25310061	CABINET FRONT ASSY
	**25310493	CABINET BACK ASSY
	**25409732	REVOLVING STAND ASSY
	**25409751	SPINDLE
	**25310093	CABINET BOTTOM
	**25757643	LABEL(REV.)
	**25770541	NAME PLATE,INSTRUCTION

*** KNOBS & PUSH BUTTONS ***

	25452771	KNOB,CONTROL
	25452791	KNOB,SLIDE

*** PRINTED & PACKING MATERIALS ***

	25804551	BAG,POLYETHYLENE(150*230)
	24813191	BAG,POLYETHYLENE(150*370)
	**25816341	FILLER,CARTON(T)
	**25816351	FILLER(B)CARTON
	**25817651	CARTON BOX
	**78034403	MONITOR SALES OFFICE LIST
	**78121666	INSTRUCTION BOOK

*** RESISTORS ***

△R616			401C6625	R,CARBON 10H 5% 1/4W
R420			401C6649	R,CARBON 100H 5% 1/4W
R743	R744	R745	401C6651	R,CARBON 120H 5% 1/4W
R565			401C6667	R,CARBON 560H 5% 1/4W
R563			401C6673	R,CARBON 1.0K 5% 1/4W
△R624			401C6677	R,CARBON 1.5K 5% 1/4W
R569			401C6683	R,CARBON 2.7K 5% 1/4W
R508			401C6685	R,CARBON 3.3K 5% 1/4W
R559			401C6761	R,CARBON 4.7M 5% 1/4W
R507			401H5623	R,CARBON 8.2H 5% 1/2W
R758	R759	R760	401H5649	R,CARBON 100H 5% 1/2W
R765				
R451			401H5657	R,CARBON 220H 5% 1/2W
R413			401H5659	R,CARBON 270H 5% 1/2W
R5A2			401H5663	R,CARBON 390H 5% 1/2W
△R537			401H5665	R,CARBON 470H 5% 1/2W
△R535			401H5667	R,CARBON 560H 5% 1/2W
△R536			401H5669	R,CARBON 680H 5% 1/2W
R666			401H5681	R,CARBON 2.2K 5% 1/2W
R503	R761		401H5689	R,CARBON 4.7K 5% 1/2W
△R621			401H5721	R,CARBON 100K 5% 1/2W
R504			401K5605	R,CARBON 1.5H 5% 1/6W
R746	R747	R748	401K5639	R,CARBON 39H 5% 1/6W
R462			401K5641	R,CARBON 47H 5% 1/6W
R460	R461		401K5649	R,CARBON 100H 5% 1/6W
R740	R741	R742	401K5653	R,CARBON 150H 5% 1/6W

SYMBOL	PARTS NO	DESCRIPTION
R704 R705 R706	401K5657	R,CARBON 220H 5% 1/6W
R502 △R629 R710	401K5665	R,CARBON 470H 5% 1/6W
R711 R712 R770		
R469A	401K5667	R,CARBON 560H 5% 1/6W
R467A R468A	401K5669	R,CARBON 680H 5% 1/6W
R431 R459 R473	401K5673	R,CARBON 1.0K 5% 1/6W
△R525 R560 R572		
R574 △R602 R729		
R730 R736 R738		
R739 R766 R845		
R846		
△R528	401K5675	R,CARBON 1.2K 5% 1/6W
R501 R543 R818	401K5677	R,CARBON 1.5K 5% 1/6W
R819 R820		
R423 R471	401K5679	R,CARBON 1.8K 5% 1/6W
R427 R472 R524	401K5681	R,CARBON 2.2K 5% 1/6W
R533 △R654 R731		
R817 R835 R842		
R424 R425 R530	401K5683	R,CARBON 2.7K 5% 1/6W
R618 R735 R737		
△R2002 R426 △R526	401K5685	R,CARBON 3.3K 5% 1/6W
△R628 △R655 △R665		
R7A2 R707 R708		
R709 R755 R756		
R757 R803 R805		
R418 R520 △R527	401K5687	R,CARBON 3.9K 5% 1/6W
R409 R410 R463	401K5689	R,CARBON 4.7K 5% 1/6W
R475 R553 R567		
R719 R720 R721		
R801 R802		
R428 R521 R562	401K5691	R,CARBON 5.6K 5% 1/6W
R564 R810 R840		
R456 R566 R816	401K5693	R,CARBON 6.8K 5% 1/6W
R454 R510 R518	401K5695	R,CARBON 8.2K 5% 1/6W
R551 R734 R833		
R834		
R2003 R403 R404	401K5697	R,CARBON 10K 5% 1/6W
R405 R406 R407		
R411 R474 R5A4		
R552 R555 R556		
R627 R804 R806		
R808 R809 R811		
R812 R815		
△R2001 R455	401K5699	R,CARBON 12K 5% 1/6W
R7A1 R807 R814	401K5701	R,CARBON 15K 5% 1/6W
R402 R457 △R652	401K5703	R,CARBON 18K 5% 1/6W
R728		
R412 R419 R422	401K5705	R,CARBON 22K 5% 1/6W
R464 R554 R568		
R561	401K5707	R,CARBON 27K 5% 1/6W
R417 R532 △R608	401K5709	R,CARBON 33K 5% 1/6W
R713 R714 R715		
R458 R476 R841	401K5711	R,CARBON 39K 5% 1/6W
R531	401K5713	R,CARBON 47K 5% 1/6W
R477 R515	401K5721	R,CARBON 100K 5% 1/6W
R516	401K5731	R,CARBON 270K 5% 1/6W
R523	401K5733	R,CARBON 330K 5% 1/6W
R522 R771	401K5745	R,CARBON 1.0M 5% 1/6W
△R509 △R514 △R529	40175109	R,CARBON 2.2H 5% 1/4W
△R538 △R626		

SYMBOL	PARTS NO	DESCRIPTION
R416	40175133	R,CARBON 22H 5% 1/4W
△R617	40175139	R,CARBON 39H 5% 1/4W
△R622	40175141	R,CARBON 47H 5% 1/4W
R542	40175169	R,CARBON 680H 5% 1/4W
△R601	40299107	R,WIRE 15H 10% 5W
R511 △R659	40371135	R,METAL 27H 5% 1W
R512	40371143	R,METAL 56H 5% 1W
R5A3	40371169	R,METAL 680H 5% 1W
R401	40372105	R,METAL 1.5H 5% 2W
△R513	40372108	R,METAL 2.0H 5% 2W
△R6A1	40372109	R,METAL 2.2H 5% 2W
△R651	40372131	R,METAL 18H 5% 2W
R625	40372147	R,METAL 82H 5% 2W
△R606	40372149	R,METAL 100H 5% 2W
R415	40372157	R,METAL 220H 5% 2W
R570	40372161	R,METAL 330H 5% 2W
△R653	40372203	R,METAL 18K 5% 2W
△R607	40372221	R,METAL 100K 5% 2W
R505 R506	40373171	R,METAL 820H 5% 3W
△R605	40373221	R,METAL 100K 5% 3W
△R619	40373329	R,METAL 0.22H 5% 3W
R749 R750 R751	40399043	RS3PB680HJ,20D(26)
R752 R753 R754	40399044	RS3PB820HJ,20D(26)
R701 R702 R703	404C1646	R,METAL 75H 1% 1/6W
R716 R717 R718	404C1673	R,METAL 1.0K 1% 1/6W
R722 R723 R724		
R732	404C1675	R,METAL 1.2K 1% 1/6W
R466	404C1677	R,METAL 1.5K 1% 1/6W
R469 △R612	404C1681	R,METAL 2.2K 1% 1/6W
△R658	404C1683	R,METAL 2.7K 1% 1/6W
R465 R468	404C1685	R,METAL 3.3K 1% 1/6W
R733	404C1689	R,METAL 4.7K 1% 1/6W
R467	404C1697	R,METAL 10K 1% 1/6W
△R613	404C1705	R,METAL 22K 1% 1/6W
R453	404C1709	R,METAL 33K 1% 1/6W
R452	404C1711	R,METAL 39K 1% 1/6W
△R614	404C1712	R,METAL 43K 1% 1/6W
△R657	404C1715	R,METAL 56K 1% 1/6W
△R656	404C1717	R,METAL 68K 1% 1/6W
R557	404C1723	R,METAL 120K 1% 1/6W
R558	404C1731	R,METAL 270K 1% 1/6W
△R615	40405125	R,METAL 10H 5% 1/4W

*** CAPACITORS ***

C535			420C9554	C,CERAMIC 500V 180PF
△C530			420C9556	C,CERAMIC 500V 270PF
C514			420C9558	C,CERAMIC 500V 390PF
C501	△C508		420C9560	C,CERAMIC 500V 560PF
△C509	△C510		420C9562	C,CERAMIC 500V 820PF
C502			4201J575	C,CERAMIC 500V 0.01UF
C727			42019175	C,CERAMIC 2KV 0.01UF
C730	C731	C732	4203J571	C,CERAMIC 500V 4700PF
△C603	△C604	△C617	42053013	C,CERAMIC 400V 1000PF
△C626	△C653	△C663	42099085	C,CERAMIC 2KV 560PF

SYMBOL			PARTS NO	DESCRIPTION
C657			42099086	C,CERAMIC 2KV 1000PF
C610			42099088	C,CERAMIC 2KV 220PF
C553	C566	C704	421A0425	C,CERAMIC 50V 0.01UF
C705	C706	C710		
C715	C716			
C740			421C0208	C,CERAMIC 50V 390PF
C455			421C0213	C,CERAMIC 50V 1000PF
C751	C752		421C0701	C,CERAMIC 50V 100PF
C803			421C3242	C,CERAMIC 50V 270PF
C516	C529	C570	421C3479	C,CERAMIC 50V 0.1UF
C576	C810			
C405	C507	C571	421J9001	C,CERAMIC 50V 0.1UF
C7A1			421J9035	C,CERAMIC 16V 0.1UF
C711	C712	C713	421J9036	C,CERAMIC 25V 0.1UF
C714	C717	C721		
C722	C723	C728		
C811				
C411			423A1033	C,CERAMIC 50V 33PF
C724	C725	C726	423A1049	C,CERAMIC 50V 150PF
C408			423A1051	C,CERAMIC 50V 180PF
C523			423A1053	C,CERAMIC 50V 220PF
C557			423A1055	C,CERAMIC 50V 270PF
C551			423A1101	C,CERAMIC 50V 470PF
C522			423A2104	C,CERAMIC 50V 220PF
C556			423A2105	C,CERAMIC 50V 270PF
C559			4239J016	C,CERAMIC 50V 390PF
C552			427A7005	C,FILM 100V 0.0022UF
C453			427F4005	C,FILM 50V 2200PF
C533			427F4013	C,FILM 50V 0.01UF
C562	C563		427F4015	C,FILM 50V 0.015UF
C416	C558	C564	427F4021	C,FILM 50V 0.047UF
C801			427F4022	C,FILM 50V 0.056UF
C414			427F4059	C,FILM 50V 4700PF
C461			427F4060	C,FILM 50V 5600PF
△ C619	△ C623		427F4063	C,FILM 50V 0.01UF
C409			427F4064	C,FILM 50V 0.012UF
△ C620			427F4071	C,FILM 50V 0.047UF
△ C655			427F4073	C,FILM 50V 0.068UF
C532	△ C621		427F4075	C,FILM 50V 0.1UF
△ C504			42703863	C,MYLAR 400V 0.01UF
C517			42754163	C,FILM 100V 0.01UF
△ C560			42799039	C,FILM 100V 3300PF
△ C611			42799099	C,MYLAR 400V 0.033UF
△ C605			428B3013	C,METAL FILM 50V 0.1UF
C418			428B3017	C,CERAMIC 50V 0.22UF
△ C505			42807513	C,METAL FILM 1.6K 3300PF
△ C503			42807591	C,METAL 1600V 2900PF
C451			4282C025	C,METAL FILM 50V 1UF
△ C602			42824325	C,FILM 250V 0.1UF
C534	△ C654		42839022	C,METAL FILM 250V 0.1UF
△ C662			42840081	C,METAL 250V 0.01UF
△ C613			42842003	C,METAL 50V 1000PF
C511			42843506	C,METAL 400V 0.6UF
△ C601			42899097	C,METAL 250V 0.47UF
C574			430B3071	C,ELEC 25V 220UF
△ C518			430B3109	C,ELEC 50V 47UF

SYMBOL			PARTS NO	DESCRIPTION
C733	C735		430B3182	C,ELEC 160V 1UF
C569			430B5051	C,ELEC 16V 220UF
C454	C701	C702	430B5069	C,ELEC 25V 47UF
C703				
C707	C708	C709	430B5103	C,ELEC 50V 2.2UF
△ C519			430B5106	C,ELEC 50V 10UF
C512			430B6017	C,ELEC 10V 220UF
C458			430B6031	C,ELEC 16V 330UF
△ C520			430B6043	C,ELEC 25V 220UF
C413			430B6054	C,ELEC 35V 100UF
C452			430B6061	C,ELEC 50V 1UF
C404			430B6065	C,ELEC 50V 10UF
C403			430B6066	C,ELEC 50V 22UF
C2001			430B6068	C,ELEC 50V 47UF
C531			430B6071	C,ELEC 50V 330UF
△ C2002			430B9015	C,ELEC 10V 47UF
C718	C720	C729	430B9028	C,ELEC 16V 47UF
C809				
C567			430B9030	C,ELEC 16V 220UF
C415			430B9039	C,ELEC 25V 22UF
C615			430B9053	C,ELEC 35V 47UF
C412			430B9054	C,ELEC 35V 100UF
C406	C565		430B9055	C,ELEC 35V 220UF
C419	C658		430B9057	C,ELEC 35V 470UF
C802			430B9060	C,ELEC 50V 0.47UF
C624			430B9065	C,ELEC 50V 10UF
C513			430B9068	C,ELEC 50V 47UF
C524	C525	C526	430B9517	C,ELEC 160V 22UF
C734				
C506			4302C190	C,ELEC 160V 100UF
C401	C521		4302F058	C,ELEC 35V 1000UF
C616			4302J067	C,ELEC 50V 33UF
C659	C660		4304A002	C,ELEC 35V 100UF
C618			4304A009	C,ELEC 35V 1UF
C656			4304A010	C,ELEC 160V 47UF
C651	C652		4304A013	C,ELEC 160V 100UF
C608	C609		43199081	C,ELEC 400V 180UF(22X50)
C457	C719		4339J031	C,ELEC 35V 4.7UF
C554	C555		435A8254	C,TANTLM 25V 3.3UF
C561			435A8307	C,TANTALM 35V 1UF
C456			43518256	C,TANTLM 25V 6.8UF

REPLACEMENT PARTS LIST

The components specified for Model JC-1403HMN.

Notes: 1. The components identified by ⚠ mark are critical for safety. Replace only with parts Number specified.
2. Parts identified with ** are United King made parts.

SYMBOL	PARTS NO	DESCRIPTION
*** CRT & TUNER ***		
⚠ CRT	33014176	CRT M34JUP23XX215(T4)
*** ICS ***		
IC554	37051036	MOS UPD4066BC
IC801	37051100	MOS UPD4030BC(EX-OR)(ESD)
IC551	37056178	IC UPC1555C
IC552	37056204	IC UPC393C
IC402	37056207	IC UPC358
IC501	37056213	MOS TC4538BP
IC701	37056245	IC M51387P
⚠ IC651	37056273	IC UPC1093J
⚠ IC451	37056408	IC HA11423DP-18
IC401	37056423	IC UPC1498H
IC553 IC802	37056614	IC BU-4538B
⚠ IC602	37056644	IC M51995P
*** TRANSISTORS ***		
Q512	350A0417	TR 2SA934-T Q
⚠ Q602	350D7216	TR 2SC945-T P
Q451 Q457 Q504	350D7217	TR 2SC945-T Q
Q505 ⚠ Q507 Q705		
Q706 Q707 Q820		
Q402 ⚠ Q403	350E3212	TR,2SC2002-T L
Q712 Q713 Q714	350H5017	TR,2SC3811-TA Q
Q801 Q803 Q805		
Q818		
Q456 Q701 Q702	350K3517	TR 2SA733/2SA733A-T Q
Q703 Q704 Q708		
Q401	350K4412	TR,2SA952 L,AT
Q501	35056311	TR,2SC2688 K
⚠ Q506	35063112	TR,2SD381 L
Q510	35063412	TR,2SD401A L
Q502	35082401	TR 2SC3486-YB
Q709 Q710 Q711	35086004	TR,2SC3953-RA D
Q508	351G0500	TR,AN1A4M-T
Q452 Q453 Q509	351G0501	TR,AA1A4M-T
Q511 Q551 Q802		
Q804 Q806 Q807		
Q808 Q809 Q810		
Q821	351G0501	TR,AA1A4M-T
Q404 Q405 Q454	351G0531	TR AA1L4M-T
⚠ Q503	35122000	TR 2SK762A
⚠ Q601	35123700	TR 2SK1045
⚠ CR601	35595015	TRIAC AC10FGM
*** DIODES ***		
D402 D403 D404	360K1027	DIODE 1SS132
D405 D406 D408		
D505 ⚠ D510 D512		
D520 D551 D553		
D554 D555 D558		

SYMBOL	PARTS NO	DESCRIPTION
D560 D561 ⚠ D607		
D7A1 D701 D702		
D703 D704 D705		
D706 D707 D708		
D709 D710 D711		
D712 D722 D723		
D801 D802 D803		
D804 D805 D806		
D809 D810 D811		
D813 D814 D815		
D816		
D407 D508 D604	360K1032	DIODE 1SS82-TA
ZD702 ZD801	360K3098	DIODE RD12EB(3)-T4
⚠ ZD501	360K3106	DIODE RD6.2EB(3)-T4
⚠ ZD2001	360K3143	DIODE,RD8.2JSB(1)-T4
ZD502	360K3154	DIODE RD12EB(1)-T4
ZD401	360K3407	DIODE RD20JSB(1)/JSAB(1)
⚠ ZD605	360K3635	DIODE RD5.1ESB(2)-T4
ZD551 ZD552 ZD553	360K3672	DIODE RD12ESB(3)-T4
ZD601	36003117	DIODE RD39EB(4)
ZD503 ZD504 ZD701	36003250	DIODE RD4.3FB(1)
ZD651	36003687	DIODE RD18ESB (2)
⚠ ZD602	36003690	DIODE RD20ESB (1)
D2001 D401 ⚠ D502	361K7160	RECTIFIER,SI. TVR-06G G23
D503 D504 ⚠ D506		
D513 D516 D713		
⚠ D605 ⚠ D606	361K7322	DIODE EL1Z-T
D516	36107160	RECTIFIER,SI. TVR-06G
⚠ D603	36107174	RECTIFIER,SI. RU1P
⚠ D652	36107511	RECTIFIER,SI. RL4Z,LFK2
D651	36107512	RECTIFIER,SI. RG4C,LFK2
D501	36107581	DIODE ERD07-15 L
⚠ D601	36108201	DIODE,NETWORK D5SBA60S
	36801023	DIODE,LIGHT-E SEL1320G
⚠ D2002	38005025	VARISTOR KB-262
⚠ TH601	38112031	THERMISTOR,POSITIVE
⚠ PC601	38200233	IC TLP634(NHE-LF2)
*** TRANSFORMERS ***		
T501	45803010	TRANS,H.DRIVE
⚠ T601	46310807	SWITCHING TRANS W184
⚠ T502	47105648	F.B.T.
⚠ T401	47502042	TRANS,SIDE PINCUSHION
*** VARIABLE RESISTORS ***		
VR7A2	41011210	R,VARIABLE B1K-V
VR7A1	41011211	R,VARIABLE B10K-V
VR4A2	41011212	R,VARIABLE B20K-V
VR4A1	41011213	R,VARIABLE B500-V
VR5A1	41011214	R,VARIABLE B20K-V
VR452	41071154	R,VARIABLE B330
VR451	41071159	R,VARIABLE B2.2K
VR710	41071160	R,VARIABLE B3.3K

SYMBOL			PARTS NO	DESCRIPTION
VR556	VR701	VR702	41071161	R,VARIABLE B4.7K
VR703				
VR551	VR704	VR705	41071163	R,VARIABLE B10K
VR706				
VR552	VR553	VR707	41071165	R,VARIABLE B22K
VR708	VR709			
VR401			41085004	R,VARIABLE B500H
⚠ VR501			41085055	R,VARIABLE B1K
⚠ VR651			41505103	R,VARIABLE B500
⚠ VR2001			41505105	R,VARIABLE B2K

*** RELAYS & SWITCHES ***

	65260002	SWITCH,SEE-SAW
⚠ RL501	65660013	RELAY VE 24HME-K

*** COILS & FILTERS ***

⚠ L503			60908068	WIDTH COIL
⚠ L504			60908070	WIDTH COIL W240 2-2
L505			60919601	COIL,LIN.
L506			60999004	COIL,CHOKE
L701	L702	L703	610E1709	COIL,FILTER 2.2UH
L704	L705	L706		
L451			610E1729	COIL,FILTER 100UH
L767	L768	L769	610F6014	COIL,FILTER 5.6UH
L501			610F7010	COIL,FILTER 2.7UH
LC706	LC707		610G2962	EMI FILTER 471BTL-EMT
⚠ L601			61051723	COIL,FILTER 33UH
			61062080	POWER LINE FILTER
FL601			61062200	LINE FILTER
L507			61064006	COIL,FILTER 50UH
L602			61065002	FERRITE BEADS
L508			61067610	COIL,FILTER
⚠ L651			61099013	COIL,CHOKE 10UH
L652			61099014	COIL,CHOKE 33UH
L502			61099019	COIL,CHOKE
⚠ L603			61099044	SHIELDING COIL 222K
DEG			**61314209	COIL,DEGAUSSING
L711			616K5058	FERRITE BEADS
LC703	LC704	LC705	616K6062	NOISE FILTER ZJSC-R40-820
LC701	LC702		61606021	NOISE FILTER DSS-271M
LC708			61606027	NOISE FILTER 2A222M

*** PWB ASSYS ***

	84K93C04	SUB PWB ASSY
	84L34F01	MAIN PWB ASSY
	84L34S01	SSI PWB ASSY

*** ELECTRICAL PARTS & MISCELLANEOUS PARTS ***

HS401			31709202	SHEET,INSULATOR
HS501			31709503	SHEET,INSULATOR
SG701	SG702	SG703	32990047	ARRESTER
SG704				
F602			66699007	FUSE ET T2A,250V-S,B SOC
SG705			66706002	SPARK GAP 1.5KV
⚠			70032026	SG/CRT SOCKET

SYMBOL			PARTS NO	DESCRIPTION
			70800039	LINE CORD
			71205037	HOLDER,FUSE
CNRH			73721003	CONNECTOR PIN 2P
			**73893054	CABLE, SIGNAL (15PD-EH)K

*** APPEARANCE PARTS ***

	24514792	COIL SPRING
	**25310061	CABINET FRONT ASSY
	**25310093	CABINET BOTTOM
	**25310493	CABINET BACK ASSY
	**25409732	REVOLVING STAND ASSY
	**25409751	SPINDLE
	**25757643	LABEL(REV.)
	**25770801	NAME,PLATE INSTRUCTION

*** KNOBS & PUSH BUTTONS ***

	25452771	KNOB,CONTROL
	25452791	KNOB,SLIDE

*** PRINTED & PACKING MATERIALS ***

	24806961	BAG, POLYETHYLENE (270*370)
	24813191	BAG,POLYETHYLENE(150*370)
	25804551	BAG,POLYETHYLENE(150*230)
	**25816341	FILLER,CARTON(T)
	**25816351	FILLER(B)CARTON
	**25819261	CARTON BOX(JC-1403HMN)
	**78034403	MONITOR SALES OFFICE LIST
	**78121665	INSTRUCTION BOOK

*** RESISTORS ***

⚠ R616			401C6625	R,CARBON 10H 5% 1/4W
R420			401C6649	R,CARBON 100H 5% 1/4W
R743	R744	R745	401C6651	R,CARBON 120H 5% 1/4W
R565			401C6667	R,CARBON 560H 5% 1/4W
R563			401C6673	R,CARBON 1.0K 5% 1/4W
⚠ R624			401C6677	R,CARBON 1.5K 5% 1/4W
R569			401C6683	R,CARBON 2.7K 5% 1/4W
R508			401C6685	R,CARBON 3.3K 5% 1/4W
R559			401C6761	R,CARBON 4.7M 5% 1/4W
R507			401H5623	R,CARBON 8.2H 5% 1/2W
R758	R759	R760	401H5649	R,CARBON 100H 5% 1/2W
R765				
R451			401H5657	R.CARBON 220H 5% 1/2W
R413			401H5659	R.CARBON 270H 5% 1/2W
R5A2			401H5663	R,CARBON 390H 5% 1/2W
⚠ R537			401H5665	R,CARBON 470H 5% 1/2W
⚠ R535			401H5667	R,CARBON 560H 5% 1/2W
⚠ R536			401H5669	R.CARBON 680H 5% 1/2W
R666			401H5681	R,CARBON 2.2K 5% 1/2W
R503	R761		401H5689	R,CARBON 4.7K 5% 1/2W
⚠ R621			401H5721	R,CARBON 100K 5% 1/2W
R504			401K5605	R,CARBON 1.5H 5% 1/6W
R746	R747	R748	401K5639	R,CARBON 39H 5% 1/6W
R462			401K5641	R,CARBON 47H 5% 1/6W
R460	R461		401K5649	R,CARBON 100H 5% 1/6W
R740	R741	R742	401K5653	R,CARBON 150H 5% 1/6W

SYMBOL	PARTS NO	DESCRIPTION
R704 R705 R706	401K5657	R,CARBON 220H 5% 1/6W
R502 △R629 R710	401K5665	R,CARBON 470H 5% 1/6W
R711 R712 R770		
R469A	401K5667	R,CARBON 560H 5% 1/6W
R467A R468A	401K5669	R,CARBON 680H 5% 1/6W
R431 R459 R473	401K5673	R,CARBON 1.0K 5% 1/6W
△R525 R560 R572		
R574 △R602 R729		
R730 R736 R738		
R739 R766 R845		
R846		
△R528	401K5675	R,CARBON 1.2K 5% 1/6W
R501 R543 R818	401K5677	R,CARBON 1.5K 5% 1/6W
R819 R820		
R423 R471	401K5679	R,CARBON 1.8K 5% 1/6W
R427 R472 R524	401K5681	R,CARBON 2.2K 5% 1/6W
R533 △R654 R731		
R817 R835 R842		
R424 R425 R530	401K5683	R,CARBON 2.7K 5% 1/6W
R618 R735 R737		
△R2002 R426 △R526	401K5685	R,CARBON 3.3K 5% 1/6W
△R628 △R655 △R665		
R7A2 R707 R708		
R709 R755 R756		
R757 R803 R805		
R418 R520 △R527	401K5687	R,CARBON 3.9K 5% 1/6W
R409 R410 R463	401K5689	R,CARBON 4.7K 5% 1/6W
R475 R553 R567	401K5689	R,CARBON 4.7K 5% 1/6W
R719 R720 R721		
R801 R802		
R428 R521 R562	401K5691	R,CARBON 5.6K 5% 1/6W
R564 R810 R840		
R456 R566 R816	401K5693	R,CARBON 6.8K 5% 1/6W
R454 R510 R518	401K5695	R,CARBON 8.2K 5% 1/6W
R551 R734 R833		
R834		
R2003 R403 R404	401K5697	R,CARBON 10K 5% 1/6W
R405 R406 R407		
R411 R474 R5A4		
R552 R555 R556		
R627 R804 R806		
R808 R809 R811		
R812 R815		
R2001 R455	401K5699	R,CARBON 12K 5% 1/6W
R7A1 R807 R814	401K5701	R,CARBON 15K 5% 1/6W
R402 R457 R652	401K5703	R,CARBON 18K 5% 1/6W
R728		
R412 R419 R422	401K5705	R,CARBON 22K 5% 1/6W
R464 R554 R568		
R561	401K5707	R,CARBON 27K 5% 1/6W
R417 R532 R608	401K5709	R,CARBON 33K 5% 1/6W
R713 R714 R715		
R458 R476 R841	401K5711	R,CARBON 39K 5% 1/6W
R531	401K5713	R,CARBON 47K 5% 1/6W
R477 R515	401K5721	R,CARBON 100K 5% 1/6W
R516	401K5731	R,CARBON 270K 5% 1/6W
R523	401K5733	R,CARBON 330K 5% 1/6W
R522 R771	401K5745	R,CARBON 1.0M 5% 1/6W

SYMBOL	PARTS NO	DESCRIPTION
△R509 △R514 △R529	40175109	R,CARBON 2.2H 5% 1/4W
△R538 △R626		
R416	40175133	R,CARBON 22H 5% 1/4W
△R617	40175139	R,CARBON 39H 5% 1/4W
△R622	40175141	R,CARBON 47H 5% 1/4W
R542	40175169	R,CARBON 680H 5% 1/4W
△R601	40299107	R,WIRE 15H 10% 5W
R511 △R659	40371135	R,METAL 27H 5% 1W
R512	40371143	R,METAL 56H 5% 1W
R5A3	40371169	R,METAL 680H 5% 1W
R401	40372105	R,METAL 1.5H 5% 2W
△R513 △R6A1	40372109	R,METAL 2.2H 5% 2W
△R651	40372131	R,METAL 18H 5% 2W
△R625	40372147	R,METAL 82H 5% 2W
△R606	40372149	R,METAL 100H 5% 2W
R415	40372157	R,METAL 220H 5% 2W
R570	40372161	R,METAL 330H 5% 2W
△R653	40372203	R,METAL 18K 5% 2W
△R607	40372221	R,METAL 100K 5% 2W
R505 R506	40373171	R,METAL 820H 5% 3W
△R605	40373221	R,METAL 100K 5% 3W
△R619	40373329	R,METAL 0.22H 5% 3W
R749 R750 R751	40399043	RS3PB680HJ,20D(26)
R752 R753 R754	40399044	RS3PB820HJ,20D(26)
R701 R702 R703	404C1646	R,METAL 75H 1% 1/6W
R716 R717 R718	404C1673	R,METAL 1.0K 1% 1/6W
R722 R723 R724		
R732	404C1675	R,METAL 1.2K 1% 1/6W
R466	404C1677	R,METAL 1.5K 1% 1/6W
R469 △R612	404C1681	R,METAL 2.2K 1% 1/6W
△R658	404C1683	R,METAL 2.7K 1% 1/6W
R465 R468	404C1685	R,METAL 3.3K 1% 1/6W
R733	404C1689	R,METAL 4.7K 1% 1/6W
R467	404C1697	R,METAL 10K 1% 1/6W
△R613	404C1705	R,METAL 22K 1% 1/6W
R453	404C1709	R,METAL 33K 1% 1/6W
R452	404C1711	R,METAL 39K 1% 1/6W
△R614	404C1712	R,METAL 43K 1% 1/6W
△R657	404C1715	R,METAL 56K 1% 1/6W
△R656	404C1717	R,METAL 68K 1% 1/6W
R557	404C1723	R,METAL 120K 1% 1/6W
R558	404C1731	R,METAL 270K 1% 1/6W
△R615	40405125	R,METAL 10H 5% 1/4W

*** CAPACITORS ***

C535	420C9554	C,CERAMIC 500V 180PF
△C530	420C9556	C,CERAMIC 500V 270PF
C514	420C9558	C,CERAMIC 500V 390PF
C501 △C508	420C9560	C,CERAMIC 500V 560PF
△C509 △C510	420C9562	C,CERAMIC 500V 820PF
C502	4201J575	C,CERAMIC 500V 0.01UF
C727	42019175	C,CERAMIC 2KV 0.01UF
C730 C731 C732	4203J571	C,CERAMIC 500V 4700PF

SYMBOL	PARTS NO	DESCRIPTION
△C603 △C604 △C617	42053013	C,CERAMIC 400V 1000PF
△C626 △C653 △C663	42099085	C,CERAMIC 2KV 560PF
C657	42099086	C,CERAMIC 2KV 1000PF
C610	42099088	C,CERAMIC 2KV 220PF
C553 C566 C704	421A0425	C,CERAMIC 50V 0.01UF
C705 C706 C710		
C715 C716		
C740	421C0208	C,CERAMIC 50V 390PF
C455	421C0213	C,CERAMIC 50V 1000PF
C751 C752	421C0701	C,CERAMIC 50V 100PF
C803	421C3242	C,CERAMIC 50V 270PF
C516 C529 C570	421C3479	C,CERAMIC 50V 0.1UF
C576 C810		
C405 C507 C571	421J9001	C,CERAMIC 50V 0.1UF
C7A1	421J9035	C,CERAMIC 16V 0.1UF
C711 C712 C713	421J9036	C,CERAMIC 25V 0.1UF
C714 C717 C721		
C722 C723 C728		
C811		
C411	423A1033	C,CERAMIC 50V 33PF
C724 C725 C726	423A1049	C,CERAMIC 50V 150PF
C408	423A1051	C,CERAMIC 50V 180PF
C523	423A1053	C,CERAMIC 50V 220PF
C557	423A1055	C,CERAMIC 50V 270PF
C551	423A1101	C,CERAMIC 50V 470PF
C522	423A2104	C,CERAMIC 50V 220PF
C556	423A2105	C,CERAMIC 50V 270PF
C559	4239J016	C,CERAMIC 50V 390PF
C552	427A7005	C,FILM 100V 0.0022UF
C453	427F4005	C,FILM 50V 2200PF
C533	427F4013	C,FILM 50V 0.01UF
C562 C563	427F4015	C,FILM 50V 0.015UF
C416 C558 C564	427F4021	C,FILM 50V 0.047UF
C801	427F4022	C,FILM 50V 0.056UF
C414	427F4059	C,FILM 50V 4700PF
C461	427F4060	C,FILM 50V 5600PF
△C619 △C623	427F4063	C,FILM 50V 0.01UF
C409	427F4064	C,FILM 50V 0.012UF
△C620	427F4071	C,FILM 50V 0.047UF
△C655	427F4073	C,FILM 50V 0.068UF
C532 △C621	427F4075	C,FILM 50V 0.1UF
△C504	42703865	C,FILM 400V 0.015UF
C517	42754163	C,FILM 100V 0.01UF
△C560	42799039	C,FILM 100V 3300PF
△C611	42799099	C,MYLAR 400V 0.033UF
△C605	428B3013	C,METAL FILM 50V 0.1UF
C418	428B3017	C,CERAMIC 50V 0.22UF
△C505	42807510	C,METAL FILM 1.6KV 2400PF
C451	4282C025	C,METAL FILM 50V 1UF
△C602	42824325	C,FILM 250V 0.1UF
C534 △C654	42839022	C,METAL FILM 250V 0.1UF
△C662	42840081	C,METAL 250V 0.01UF
△C613	42842003	C,METAL 50V 1000PF
△C503	42842007	C,METAL 1.6KV 3100PF

SYMBOL	PARTS NO	DESCRIPTION
C5S1	42899015	C,METAL FILM 400V 0.47UF
△C601	42899097	C,METAL 250V 0.47UF
C574	430B3071	C,ELEC 25V 220UF
△C518	430B3109	C,ELEC 50V 47UF
C733 C735	430B3182	C,ELEC 160V 1UF
C569	430B5051	C,ELEC 16V 220UF
C454 C701 C702	430B5069	C,ELEC 25V 47UF
C703		
C707 C708 C709	430B5103	C,ELEC 50V 2.2UF
△C519	430B5106	C,ELEC 50V 10UF
C512	430B6017	C,ELEC 10V 220UF
C458	430B6031	C,ELEC 16V 330UF
△C520	430B6043	C,ELEC 25V 220UF
C413	430B6054	C,ELEC 35V 100UF
C452	430B6061	C,ELEC 50V 1UF
C404	430B6065	C,ELEC 50V 10UF
C403	430B6066	C,ELEC 50V 22UF
C2001	430B6068	C,ELEC 50V 47UF
C531	430B6071	C,ELEC 50V 330UF
△C2002	430B9015	C,ELEC 10V 47UF
C718 C720 C729	430B9028	C,ELEC 16V 47UF
C809	430B9028	C,ELEC 16V 47UF
C567	430B9030	C,ELEC 16V 220UF
C415	430B9039	C,ELEC 25V 22UF
C615	430B9053	C,ELEC 35V 47UF
C412	430B9054	C,ELEC 35V 100UF
C406 C565	430B9055	C,ELEC 35V 220UF
C419 C658	430B9057	C,ELEC 35V 470UF
C802	430B9060	C,ELEC 50V 0.47UF
C624	430B9065	C,ELEC 50V 10UF
C513	430B9068	C,ELEC 50V 47UF
C524 C525 C526	430B9517	C,ELEC 160V 22UF
C734		
C506	4302C190	C,ELEC 160V 100UF
C401 C521	4302F058	C,ELEC 35V 1000UF
C616	4302J067	C,ELEC 50V 33UF
C659 C660	4304A002	C,ELEC 35V 100UF
C618	4304A009	C,ELEC 35V 1UF
C656	4304A010	C,ELEC 160V 47UF
C651 C652	4304A013	C,ELEC 160V 100UF
C608 C609	43199081	C,ELEC 400V 180UF(22X50)
C457 C719	4339J031	C,ELEC 35V 4.7UF
C554 C555	435A8254	C,TANTLM 25V 3.3UF
C561	435A8307	C,TANTALM 35V 1UF
C456	43518256	C,TANTLM 25V 6.8UF

REPLACEMENT PARTS LIST

The components specified for Models JC-1403HME(PH)/EE(PH)/ED(PH).

Notes: 1. The components identified by △ mark are critical for safety. Replace only with parts Number specified.
2. Parts identified with ** are United King made parts.

SYMBOL	PARTS NO	DESCRIPTION
*** CRT & TUNER ***		
△CRT	33014170	CRT M34ECL12X46
*** ICS ***		
IC554	37051036	MOS UPD4066BC
IC801	37051100	MOS UPD4030BC(EX-OR)(ESD)
IC551	37056178	IC UPC1555C
IC552	37056204	IC UPC393C
IC402	37056207	IC UPC358
IC501	37056213	MOS TC4538BP
IC701	37056245	IC M51387P
△IC651	37056273	IC UPC1093J
△IC451	37056408	IC HA11423DP-18
IC401	37056423	IC UPC1498H
IC553 IC802	37056614	IC BU-4538B
△IC602	37056644	IC M51995P
*** TRANSISTORS ***		
Q512	350A0417	TR 2SA934-T Q
△Q602	350D7216	TR 2SC945-T P
Q451 Q457 Q504	350D7217	TR 2SC945-T Q
Q505 △Q507 Q705		
Q706 Q707 Q820		
Q402 △Q403	350E3212	TR,2SC2002-T L
Q712 Q713 Q714	350H5017	TR,2SC3811-TA Q
Q801 Q803 Q805		
Q818		
Q456 Q701 Q702	350K3517	TR 2SA733/2SA733A-T Q
Q703 Q704 Q708		
Q401	350K4412	TR,2SA952 L,AT
Q501	35056311	TR,2SC2688 K
△Q506	35063112	TR,2SD381 L
Q510	35063412	TR,2SD401A L
△Q502	35082401	TR 2SC3486-YB
Q709 Q710 Q711	35086004	TR,2SC3953-RA D
Q508	351G0500	TR,AN1A4M-T
Q452 Q453 Q509	351G0501	TR,AA1A4M-T
Q511 Q551 Q802		
Q804 Q806 Q807		
Q808 Q809 Q810		
Q821	351G0501	TR,AA1A4M-T
Q404 Q405 Q454	351G0531	TR AA1L4M-T
△Q503	35122000	TR 2SK762A
△Q601	35122220	TR 2SK872
△CR601	35595015	TRIAC AC10FGM
*** DIODES ***		
D402 D403 D404	360K1027	DIODE 1SS132
D405 D406 D408		
D505 △D510 D512		
D520 D551 D553		
D554 D555 D558		

SYMBOL	PARTS NO	DESCRIPTION
D560 D561 △D607		
D7A1 D701 D702		
D703 D704 D705		
D706 D707 D708		
D709 D710 D711		
D712 D722 D723		
D801 D802 D803		
D804 D805 D806		
D809 D810 D811		
D813 D814 D815		
D816		
D407 D508 D604	360K1032	DIODE 1SS82-TA
D716 D719 D720		
ZD702 ZD801	360K3098	DIODE RD12EB(3)-T4
△ZD501	360K3106	DIODE RD6.2EB(3)-T4
△ZD2001	360K3143	DIODE,RD8.2JSB(1)-T4
ZD502	360K3154	DIODE RD12EB(1)-T4
ZD401	360K3407	DIODE RD20JSB(1)/JSAB(1)
△ZD605	360K3635	DIODE RD5.1ESB(2)-T4
ZD551 ZD552 ZD553	360K3672	DIODE RD12ESB(3)-T4
D719	36001032	DIODE 1SS82
ZD601	36003117	DIODE RD39EB(4)
ZD503 ZD504 ZD701	36003250	DIODE RD4.3FB(1)
ZD651	36003687	DIODE RD18ESB (2)
△ZD602	36003690	DIODE RD20ESB.(1)
D2001 D401 △D502	361K7160	RECTIFIER,SI. TVR-06G G23
D503 D504 △D506		
D513 D516 D713		
△D605 △D606	361K7322	DIODE EL1Z-T
D516	36107160	RECTIFIER,SI. TVR-06G
△D603	36107174	RECTIFIER,SI. RU1P
△D652	36107511	RECTIFIER,SI. RL4Z,LFK2
D651	36107512	RECTIFIER,SI. RG4C,LFK2
D501	36107581	DIODE ERD07-15 L
△D601	36108201	DIODE,NETWORK D5SBA60S
	36801023	DIODE,LIGHT-E SEL1320G
△D2002	38005025	VARISTOR KB-262
△TH601	38112031	THERMISTOR,POSITIVE
△PC601	38200233	IC TLP634(NHE-LF2)
*** TRANSFORMERS ***		
T501	45803010	TRANS,H.DRIVE
△T601	46310807	SWITCHING TRANS W184
△T502	47105648	F.B.T.
△T401	47502042	TRANS,SIDE PINCUSHION
*** VARIABLE RESISTORS ***		
VR7A2	41011210	R,VARIABLE B1K-V
VR7A1	41011211	R,VARIABLE B10K-V
VR4A2	41011212	R,VARIABLE B20K-V
VR4A1	41011213	R,VARIABLE B500-V
VR5A1	41011214	R,VARIABLE B20K-V

SYMBOL			PARTS NO	DESCRIPTION
VR452			41071154	R,VARIABLE B330
VR451			41071159	R,VARIABLE B2.2K
VR710			41071160	R,VARIABLE B3.3K
VR556	VR701	VR702	41071161	R,VARIABLE B4.7K
VR703				
VR551	VR704	VR705	41071163	R,VARIABLE B10K
VR706				
VR552	VR553	VR707	41071165	R,VARIABLE B22K
VR708	VR709			
VR401			41085004	R,VARIABLE B500H
△ VR501			41085055	R,VARIABLE B1K
△ VR651			41505103	R,VARIABLE B500
△ VR2001			41505105	R,VARIABLE B2K

*** RELAYS & SWITCHES ***

	65260002	SWITCH,SEE-SAW
△ RL501	65660013	RELAY VE 24HME-K

*** COILS & FILTERS ***

△ L504			60908050	WIDTH COIL
△ L503			60908065	COIL,VARIABLE WIDTH
L505			60919113	COIL,H.LIN
L506			60999004	COIL,CHOKE
L701	L702	L703	610E1709	COIL,FILTER 2.2UH
L704	L705	L706		
L451			610E1729	COIL,FILTER 100UH
L767	L768	L769	610F6014	COIL,FILTER 5.6UH
L501			610F7010	COIL,FILTER 2.7UH
LC706	LC707		610G2962	EMI FILTER 471BTL-EMT
△ L601			61051723	COIL,FILTER 33UH
			**61062076	POWER LINE FILTER
FL601			61062200	LINE FILTER
L507			61064006	COIL,FILTER 50UH
L602			61065002	FERRITE BEADS
L508			61067610	COIL,FILTER
△ L651			61099013	COIL,CHOKE 10UH
L652			61099014	COIL,CHOKE 33UH
L502			61099019	COIL,CHOKE
△ L603			61099044	SHIELDING COIL 222K
DEG			**61314215	COIL,DEGAUSSING
L711			616K5058	FERRITE BEADS
LC703	LC704	LC705	616K6062	NOISE FILTER ZJSC-R40-820
LC701	LC702		61606021	NOISE FILTER DSS-271M
LC708			61606027	NOISE FILTER 2A222M

*** PWB ASSYS ***

	84L24C02	SUB PWB ASSY
	84L24F01	MAIN PWB ASSY

*** ELECTRICAL PARTS & MISCELLANEOUS PARTS ***

HS401			31709202	SHEET,INSULATOR
HS501			31709503	SHEET,INSULATOR
SG701	SG702	SG703	32990047	ARRESTER
SG704				
F602			66699007	FUSE ET T2A,250V-S,B SOC

SYMBOL			PARTS NO	DESCRIPTION
SG705			66706002	SPARK GAP 1.5KV
△			70032026	SG/CRT SOCKET
JC-1403HME (PH)/ED (PH)			**70800063	LINE CORD
JC-1403HMEE (PH)			70800323	LINE, POWER
			71205037	HOLDER, FUSE
			73721003	CONNECTER PIN 2P
JC-1403HME (PH)/EE (PH)			**73893054	CABLE, SIGNAL (15PD SUB-EH) K
JC-1403HMED (PH)			73893071	CABLE, SIGNAL 2095 GRY

*** APPEARANCE PARTS ***

	24514792	COIL SPRING
	**25310061	CABINET FRONT ASSY
	**25310493	CABINET BACK ASSY
	**25409732	REVOLVING STAND ASSY
	**25409751	SPINDLE
	**25310093	CABINET BOTTOM
JC-1403HME (PH)	**25768562	NAME PLATE, INSTRUCTION
JC-1403HMEE (PH)	**25769152	NAME PLATE, INSTRUCTION
JC-1403HMED (PH)	**25769643	NAME PLATE, INSTRUCTION

*** KNOBS & PUSH BUTTONS ***

	25452771	KNOB, CONTROL
	25452791	KNOB, SLIDE

*** PRINTED & PACKING MATERIALS ***

JC-1403HME (PH)/ED (PH)	24813191	BAG, POLYETHYLENE (150*370)
JC-1403HME (PH)/EE (PH)	25815061	BAG, POLYETHYLENE (270*370)
JC-1403HMEE (PH)	24813501	BAG, POLYETHYLENE
JC-1403HME (PH)/ED (PH)	24804551	BAG, POLYETHYLENE (150*230)
JC-1403HMED (PH)	24806961	BAG, POLYETHYLENE (270*370)
	**25816341	FILLER, CARTON (T)
	**25816351	FILLER (B) CARTON
JC-1403HME (PH)	**25816981	CARTON BOX
JC-1403HMEE (PH)	**25817431	CARTON BOX
JC-1403HMED (PH)	**25817651	CARTON BOX
	**78121665	INSTRUCTION BOOK
	**78034403	MONITOR SALES OFFICE LIST

*** RESISTORS ***

△ R616			401C6625	R,CARBON 10H 5% 1/4W
R420			401C6649	R,CARBON 100H 5% 1/4W
R743	R744	R745	401C6651	R,CARBON 120H 5% 1/4W
R565			401C6667	R,CARBON 560H 5% 1/4W
R563			401C6673	R,CARBON 1.0K 5% 1/4W
△ R624			401C6677	R,CARBON 1.5K 5% 1/4W
R569			401C6683	R,CARBON 2.7K 5% 1/4W
R508			401C6685	R,CARBON 3.3K 5% 1/4W
R559			401C6761	R,CARBON 4.7M 5% 1/4W
R507			401H5623	R,CARBON 8.2H 5% 1/2W
R758	R759	R760	401H5649	R,CARBON 100H 5% 1/2W
R765				
R451	△ R535		401H5657	R,CARBON 220H 5% 1/2W
R413			401H5659	R,CARBON 270H 5% 1/2W
R5A2			401H5663	R,CARBON 390H 5% 1/2W
△ R536			401H5671	R,CARBON 820H 5% 1/2W

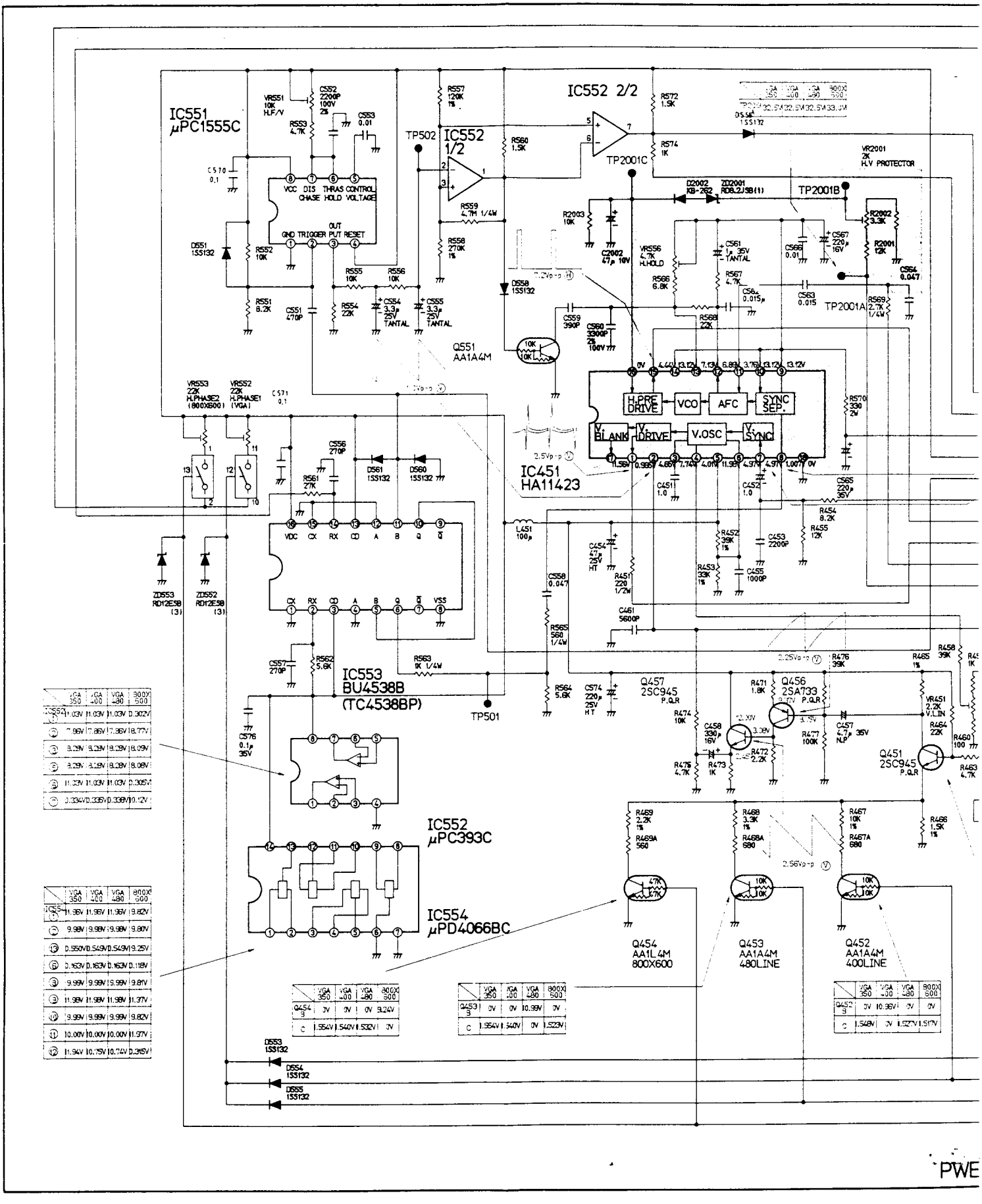
SYMBOL	PARTS NO	DESCRIPTION
R666	401H5681	R,CARBON 2.2K 5% 1/2W
R503 R761	401H5689	R,CARBON 4.7K 5% 1/2W
⚠R621	401H5721	R,CARBON 100K 5% 1/2W
R504	401K5605	R,CARBON 1.5H 5% 1/6W
R746 R747 R748	401K5639	R,CARBON 39H 5% 1/6W
R462	401K5641	R,CARBON 47H 5% 1/6W
R460 R461	401K5649	R,CARBON 100H 5% 1/6W
R740 R741 R742	401K5653	R,CARBON 150H 5% 1/6W
R704 R705 R706	401K5657	R,CARBON 220H 5% 1/6W
R502 ⚠R629 R710	401K5665	R,CARBON 470H 5% 1/6W
R711 R712 R770		
R469A	401K5667	R,CARBON 560H 5% 1/6W
R467A R468A	401K5669	R,CARBON 680H 5% 1/6W
U89 J90 R431	401K5673	R,CARBON 1.0K 5% 1/6W
R459 R473 ⚠R525		
R560 R572 R574		
⚠R602 R729 R730		
R736 R738 R739		
R766		
⚠R528	401K5675	R,CARBON 1.2K 5% 1/6W
R501 R543 R818	401K5677	R,CARBON 1.5K 5% 1/6W
R819 R820		
R423 R471	401K5679	R,CARBON 1.8K 5% 1/6W
R427 R472 R524	401K5681	R,CARBON 2.2K 5% 1/6W
R533 ⚠R654 R731		
R817 R835 R842		
R424 R425 R530	401K5683	R,CARBON 2.7K 5% 1/6W
R618 R735 R737		
⚠R2002 R426 ⚠R526	401K5685	R,CARBON 3.3K 5% 1/6W
⚠R628 ⚠R655 ⚠R665	401K5685	R,CARBON 3.3K 5% 1/6W
R7A2 R707 R708		
R709 R755 R756		
R757 R803 R805		
R418 R520 ⚠R527	401K5687	R,CARBON 3.9K 5% 1/6W
R409 R410 R463	401K5689	R,CARBON 4.7K 5% 1/6W
R475 R553 R567		
R719 R720 R721		
R801 R802		
R428 R521 R562	401K5691	R,CARBON 5.6K 5% 1/6W
R564 R810 R840		
R456 R566 R816	401K5693	R,CARBON 6.8K 5% 1/6W
R454 R510 R518	401K5695	R,CARBON 8.2K 5% 1/6W
R551 R734 R833		
R834		
R2003 R403 R404	401K5697	R,CARBON 10K 5% 1/6W
R405 R406 R407		
R411 R474 R5A4		
R552 R555 R556		
R627 R804 R806		
R808 R809 R811		
R812 R815		
⚠R2001 R455	401K5699	R,CARBON 12K 5% 1/6W
R7A1 R807 R814	401K5701	R,CARBON 15K 5% 1/6W
R402 R457 ⚠R652	401K5703	R,CARBON 18K 5% 1/6W
R728		
R419 R422 R464	401K5705	R,CARBON 22K 5% 1/6W
R554 R568		

SYMBOL	PARTS NO	DESCRIPTION
R561	401K5707	R,CARBON 27K 5% 1/6W
R412 R417 R532	401K5709	R,CARBON 33K 5% 1/6W
⚠R608 R713 R714		
R715		
R458 R476 R841	401K5711	R,CARBON 39K 5% 1/6W
R531	401K5713	R,CARBON 47K 5% 1/6W
R477 R515	401K5721	R,CARBON 100K 5% 1/6W
R516	401K5731	R,CARBON 270K 5% 1/6W
R523	401K5733	R,CARBON 330K 5% 1/6W
R522 R771	401K5745	R,CARBON 1.0M 5% 1/6W
⚠R509 ⚠R514 ⚠R529	40175109	R,CARBON 2.2H 5% 1/4W
⚠R538 ⚠R626		
R416	40175133	R,CARBON 22H 5% 1/4W
⚠R617	40175139	R,CARBON 39H 5% 1/4W
⚠R622	40175141	R,CARBON 47H 5% 1/4W
R542	40175169	R,CARBON 680H 5% 1/4W
⚠R601	40299107	R,WIRE 15H 10% 5W
⚠R513	40371117	R,METAL 4.7H 5% 1W
R511 ⚠R659	40371135	R,METAL 27H 5% 1W
R512	40371143	R,METAL 56H 5% 1W
R5A3	40371169	R,METAL 680H 5% 1W
R401	40372105	R,METAL 1.5H 5% 2W
⚠R6A1	40372109	R,METAL 2.2H 5% 2W
⚠R651	40372131	R,METAL 18H 5% 2W
⚠R625	40372147	R,METAL 82H 5% 2W
⚠R606	40372149	R,METAL 100H 5% 2W
R415	40372157	R,METAL 220H 5% 2W
R570	40372161	R,METAL 330H 5% 2W
⚠R537	40372165	R,METAL 470H 5% 2W
⚠R653	40372203	R,METAL 18K 5% 2W
⚠R607	40372221	R,METAL 100K 5% 2W
R505 R506	40373171	R,METAL 820H 5% 3W
⚠R605	40373221	R,METAL 100K 5% 3W
⚠R619	40373329	R,METAL 0.22H 5% 3W
R749 R750 R751	40399043	RS3PB680HJ,20D(26)
R752 R753 R754	40399044	RS3PB820HJ,20D(26)
R701 R702 R703	404C1646	R,METAL 75H 1% 1/6W
R716 R717 R718	404C1673	R,METAL 1.0K 1% 1/6W
R722 R723 R724		
R732	404C1675	R,METAL 1.2K 1% 1/6W
R466	404C1677	R,METAL 1.5K 1% 1/6W
R469 ⚠R612	404C1681	R,METAL 2.2K 1% 1/6W
⚠R658	404C1683	R,METAL 2.7K 1% 1/6W
R468	404C1685	R,METAL 3.3K 1% 1/6W
R465	404C1687	R,METAL 3.9K 1% 1/6W
R733	404C1689	R,METAL 4.7K 1% 1/6W
R467	404C1697	R,METAL 10K 1% 1/6W
⚠R613	404C1705	R,METAL 22K 1% 1/6W
R453	404C1709	R,METAL 33K 1% 1/6W
R452	404C1711	R,METAL 39K 1% 1/6W
⚠R614	404C1712	R,METAL 43K 1% 1/6W
⚠R657	404C1715	R,METAL 56K 1% 1/6W
⚠R656	404C1717	R,METAL 68K 1% 1/6W
R557	404C1723	R,METAL 120K 1% 1/6W
R558	404C1731	R,METAL 270K 1% 1/6W
⚠R615	40405125	R,METAL 10H 5% 1/4W

SYMBOL	PARTS NO	DESCRIPTION
*** CAPACITORS ***		
C535	420C9554	C,CERAMIC 500V 180PF
⚠C530	420C9556	C,CERAMIC 500V 270PF
C514	420C9558	C,CERAMIC 500V 390PF
C501	420C9560	C,CERAMIC 500V 560PF
⚠C508 ⚠C510	420C9563	C,CERAMIC 500V 0.001UF
⚠C509	420C9565	C,CERAMIC 500V 1500PF
C502	4201J575	C,CERAMIC 500V 0.01UF
C727	42019175	C,CERAMIC 2KV 0.01UF
C730 C731 C732	4203J571	C,CERAMIC 500V 4700PF
⚠C603 ⚠C604 ⚠C617	42053013	C,CERAMIC 400V 1000PF
⚠C626 ⚠C653 ⚠C663	42099085	C,CERAMIC 2KV 560PF
⚠C657	42099086	C,CERAMIC 2KV 1000PF
C610	42099088	C,CERAMIC 2KV 220PF
C553 C566 C704	421A0425	C,CERAMIC 50V 0.01UF
C705 C706 C710		
C715 C716		
C740	421C0208	C,CERAMIC 50V 390PF
C455	421C0213	C,CERAMIC 50V 1000PF
C751 C752	421C0701	C,CERAMIC 50V 100PF
C803	421C3242	C,CERAMIC 50V 270PF
C516 C529 C570	421C3479	C,CERAMIC 50V 0.1UF
C576 C810		
C405 C507 C571	421J9001	C,CERAMIC 50V 0.1UF
C7A1	421J9035	C,CERAMIC 16V 0.1UF
C711 C712 C713	421J9036	C,CERAMIC 25V 0.1UF
C714 C717 C721		
C722 C723 C728		
C811		
C411	423A1033	C,CERAMIC 50V 33PF
C724 C725 C726	423A1049	C,CERAMIC 50V 150PF
C408	423A1051	C,CERAMIC 50V 180PF
C523	423A1053	C,CERAMIC 50V 220PF
C557	423A1055	C,CERAMIC 50V 270PF
C551	423A1101	C,CERAMIC 50V 470PF
C522	423A2104	C,CERAMIC 50V 220PF
C556	423A2105	C,CERAMIC 50V 270PF
C559	4239J016	C,CERAMIC 50V 390PF
C552	427A7005	C,FILM 100V 0.0022UF
C453	427F4005	C,FILM 50V 2200PF
C562 C563	427F4015	C,FILM 50V 0.015UF
C533	427F4018	C,FILM 50V 0.027UF
C416 C558 C564	427F4021	C,FILM 50V 0.047UF
C801	427F4022	C,FILM 50V 0.056UF
C414	427F4059	C,FILM 50V 4700PF
C461	427F4060	C,FILM 50V 5600PF
⚠C619 ⚠C623	427F4063	C,FILM 50V 0.01UF
C409	427F4064	C,FILM 50V 0.012UF
⚠C620	427F4071	C,FILM 50V 0.047UF
⚠C655	427F4073	C,FILM 50V 0.068UF
C532 ⚠C621	427F4075	C,FILM 50V 0.1UF
⚠C504	42703865	C,FILM 400V 0.015UF
C517	42754163	C,FILM 100V 0.01UF
⚠C560	42799039	C,FILM 100V 3300PF
⚠C611	42799099	C,MYLAR 400V 0.033UF

SYMBOL	PARTS NO	DESCRIPTION
⚠C605	428B3013	C,METAL FILM 50V 0.1UF
C418	428B3017	C,CERAMIC 50V 0.22UF
⚠C503	42807591	C,METAL 1600V 2900PF
⚠C505	42808508	C,METAL 1600V 2000UF
C451	4282C025	C,METAL FILM 50V 1UF
⚠C602	42824325	C,FILM 250V 0.1UF
C534 ⚠C654	42839022	C,METAL FILM 250V 0.1UF
⚠C662	42840081	C,METAL 250V 0.01UF
⚠C613	42842003	C,METAL 50V 1000PF
⚠C511	42899015	C,METAL FILM 400V 0.47UF
⚠C601	42899097	C,METAL 250V 0.47UF
C574	430B3071	C,ELEC 25V 220UF
⚠C518	430B3109	C,ELEC 50V 47UF
C733 C735	430B3182	C,ELEC 160V 1UF
C569	430B5051	C,ELEC 16V 220UF
C454 C701 C702	430B5069	C,ELEC 25V 47UF
C703		
C707 C708 C709	430B5103	C,ELEC 50V 2.2UF
⚠C519	430B5106	C,ELEC 50V 10UF
C512	430B6017	C,ELEC 10V 220UF
C458	430B6031	C,ELEC 16V 330UF
⚠C520	430B6043	C,ELEC 25V 220UF
C413	430B6054	C,ELEC 35V 100UF
C452	430B6061	C,ELEC 50V 1UF
C404	430B6065	C,ELEC 50V 10UF
C403	430B6066	C,ELEC 50V 22UF
C2001	430B6068	C,ELEC 50V 47UF
C531	430B6071	C,ELEC 50V 330UF
⚠C2002	430B9015	C,ELEC 10V 47UF
C718 C720 C729	430B9028	C,ELEC 16V 47UF
C809		
C567	430B9030	C,ELEC 16V 220UF
C415	430B9039	C,ELEC 25V 22UF
C615	430B9053	C,ELEC 35V 47UF
C412	430B9054	C,ELEC 35V 100UF
C406 C565	430B9055	C,ELEC 35V 220UF
C419 C658	430B9057	C,ELEC 35V 470UF
C802	430B9060	C,ELEC 50V 0.47UF
C624	430B9065	C,ELEC 50V 10UF
C513	430B9068	C,ELEC 50V 47UF
C524 C525 C526	430B9517	C,ELEC 160V 22UF
C734		
C506	4302C190	C,ELEC 160V 100UF
C401 C521	4302F058	C,ELEC 35V 1000UF
C616	4302J067	C,ELEC 50V 33UF
C659 C660	4304A002	C,ELEC 35V 100UF
C618	4304A009	C,ELEC 35V 1UF
C656	4304A010	C,ELEC 160V 47UF
C651 C652	4304A013	C,ELEC 160V 100UF
C608 C609	43199081	C,ELEC 400V 180UF(22X50)
C457 C719	4339J031	C,ELEC 35V 4.7UF
C554 C555	435A8254	C,TANTLM 25V 3.3UF
C561	435A8307	C,TANTALM 35V 1UF
C456	43518256	C,TANTLM 25V 6.8UF

MODEL JC-1403HME/EE/ED/R/N/E(PH)/EE(PH)/ED(PH)
SCHEMATIC DIAGRAM (SUB/CRT PWB)



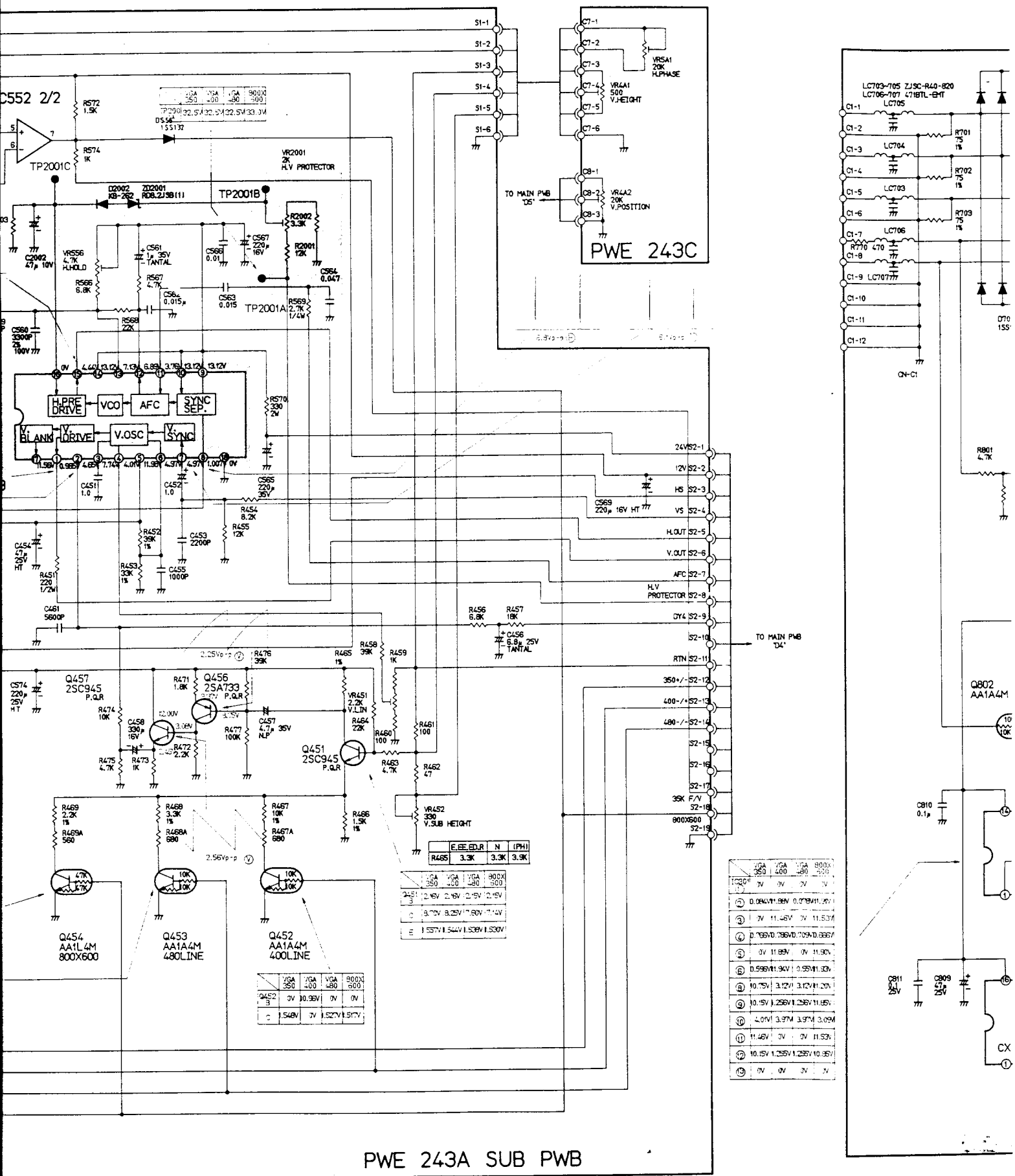
	VGA 350	VGA 400	VGA 480	800X 600
IC551 ①	11.03V	11.03V	11.03V	0.302V
②	7.96V	7.86V	7.96V	8.77V
③	8.29V	8.29V	8.29V	8.09V
⑤	8.29V	8.29V	8.29V	8.08V
⑨	11.03V	11.03V	11.03V	0.305V
⑩	0.334V	0.335V	0.336V	10.12V

	VGA 350	VGA 400	VGA 480	800X 600
IC554 ①	11.96V	11.96V	11.96V	9.82V
②	9.98V	9.98V	9.98V	9.80V
⑬	0.550V	0.549V	0.549V	9.25V
⑥	0.163V	0.163V	0.163V	0.118V
⑨	9.99V	9.99V	9.99V	9.81V
⑤	11.98V	11.98V	11.98V	11.97V
⑩	9.99V	9.99V	9.99V	9.82V
⑪	10.00V	10.00V	10.00V	11.97V
⑫	11.94V	10.75V	10.74V	0.315V

	VGA 350	VGA 400	VGA 480	800X 600
Q454 B	3V	0V	0V	9.24V
C	1.554V	1.540V	1.532V	0V

	VGA 350	VGA 400	VGA 480	800X 600
Q453 B	0V	0V	10.99V	0V
C	1.554V	1.540V	0V	1.523V

	VGA 350	VGA 400	VGA 480	800X 600
Q452 B	0V	10.98V	0V	0V
C	1.548V	0V	1.527V	1.517V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PWE 243A SUB PWB
TP2001C
TP2001B
TP2001A
VR2001 2K H.V PROTECTOR
VRSA1 20K H.PHASE
VRAA1 500 V.HEIGHT
VRAA2 20K V.POSITION
TO MAIN PWB 'D5'
TO MAIN PWB 'D4'
H.PRE DRIVE
VCO
AFC
SYNC SEP.
V. BLANK
V. DRIVE
V.OSC
V. SYNC
Q457 2SC945 P,Q,R
Q456 2SA733 P,Q,R
Q451 2SC945 P,Q,R
Q454 AA1L4M 800X600
Q453 AA1A4M 480LINE
Q452 AA1A4M 400LINE
VR451 2.2K V.LIN
VR452 330 V.SUB HEIGHT
24V S2-1
12V S2-2
HS S2-3
VS S2-4
H.OUT S2-5
V.OUT S2-6
AFC S2-7
H.V PROTECTOR S2-8
DY4 S2-9
S2-10
RTN S2-11
350+/- S2-12
400-/+ S2-13
480-/- S2-14
S2-15
S2-16
S2-17
35K F/V S2-18
800X600 S2-19
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LC706~707 471BTL-EMT
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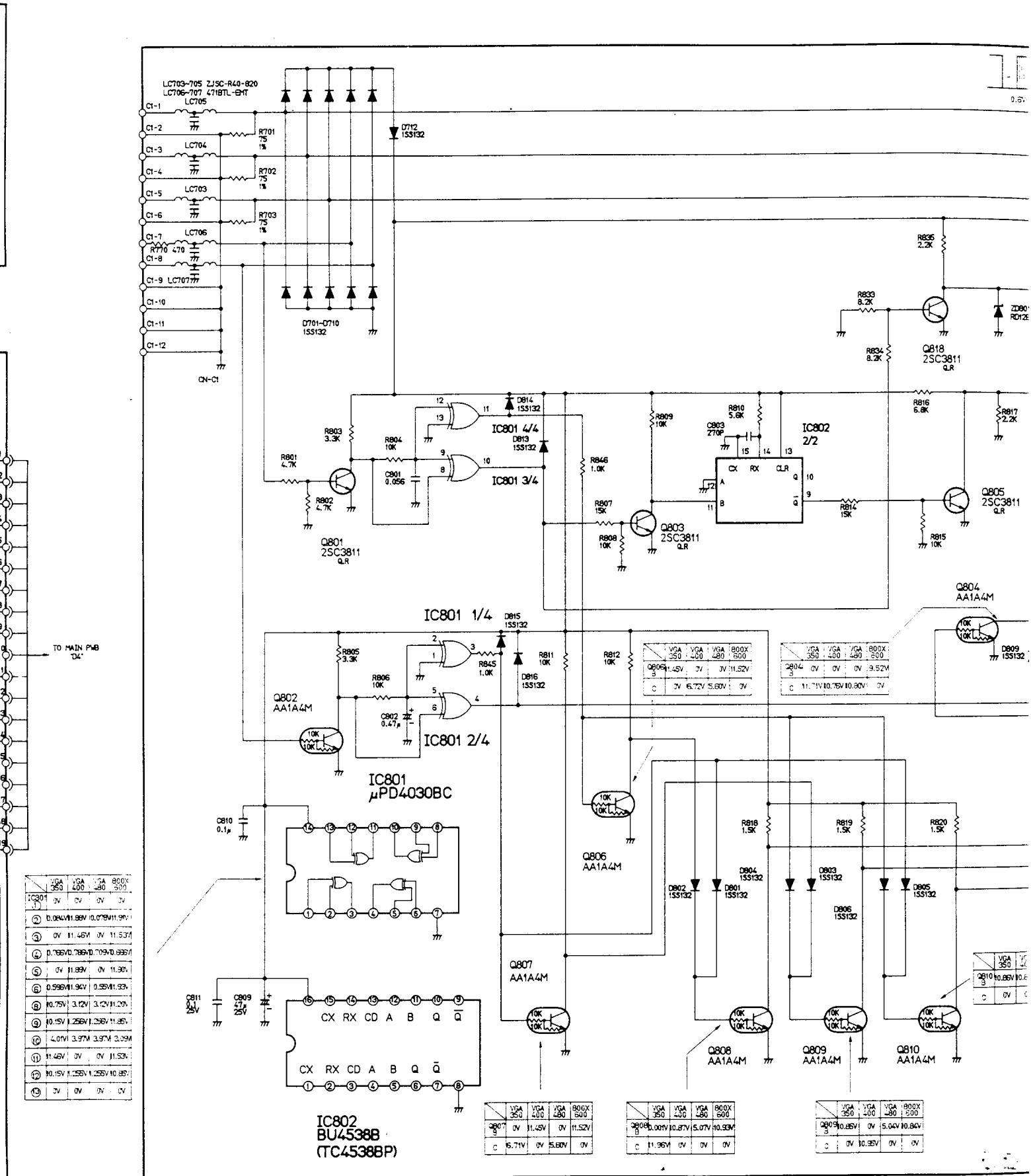
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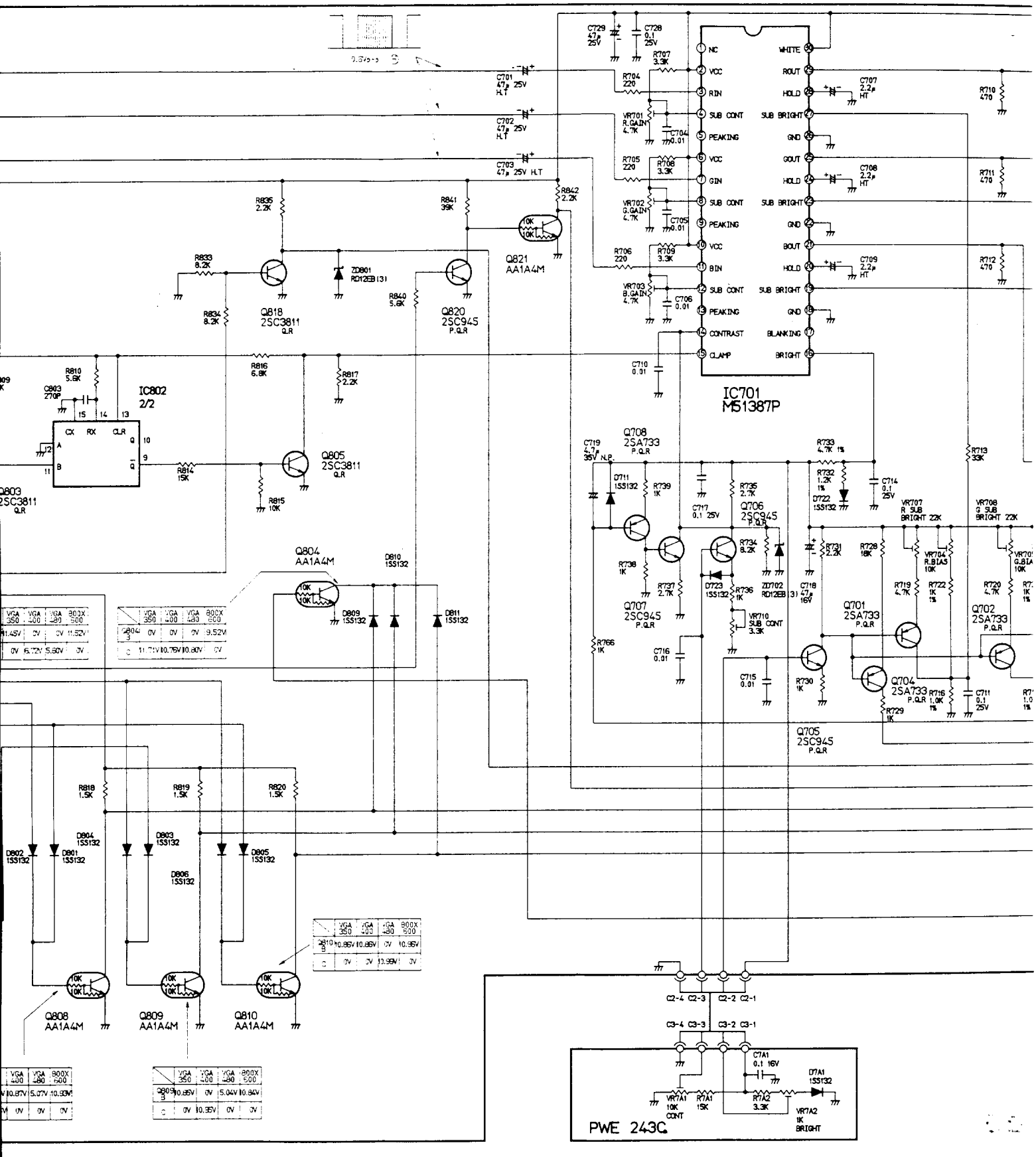
C1-10
C1-11
C1-12
R770 470
R701 75 1%
R702 75 1%
R703 75 1%
D712 1SS132
D701-D710 1SS132
CN-C1
R835 2.2K
R833 8.2K
R834 8.2K
Q818 2SC3811 Q,R
R816 6.8K
R817 2.2K
R809 10K
R810 5.6K
C803 270P
IC802 2/2
CX RX CLR
Q805 2SC3811 Q,R
R814 15K
R815 10K
R803 3.3K
R804 10K
R801 4.7K
R802 4.7K
C801 0.056
D814 1SS132
D813 1SS132
IC801 4/4
IC801 3/4
R846 1.0K
R807 15K
R808 10K
Q803 2SC3811 Q,R
Q801 2SC3811 Q,R
IC801 1/4
D815 1SS132
R805 3.3K
R806 10K
R845 1.0K
R811 10K
D816 1SS132
R812 10K
Q802 AA1A4M
C802 0.47μ
IC801 2/4
IC801 μPD4030BC
Q804 AA1A4M
D809 1SS132
Q806 AA1A4M
Q807 AA1A4M
Q808 AA1A4M
Q809 AA1A4M
Q810 AA1A4M
R818 1.5K
R819 1.5K
R820 1.5K
D802 1SS132
D801 1SS132
D804 1SS132
D803 1SS132
D805 1SS132
D806 1SS132
C810 0.1μ
C811 0.1 25V
C809 47μ 25V
CX RX CD A B Q Q̄
IC802 BU4538B (TC4538BP)
TO MAIN PWB "D4"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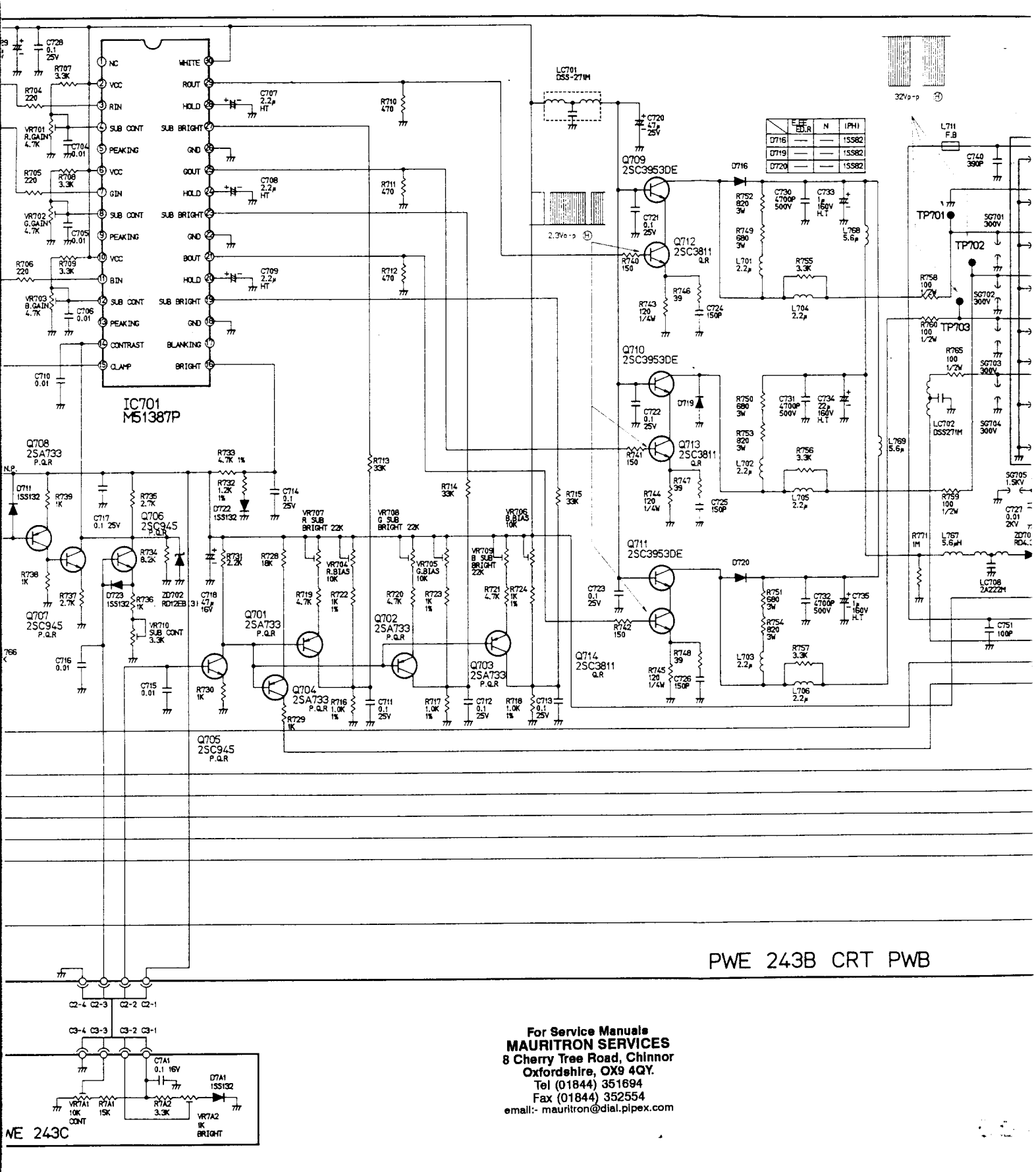
D806
1SS132
D809
1SS132
D810
1SS132
D811
1SS132
D711
1SS132
D722
1SS132
D723
1SS132
PWE 243C



PWE 243B CRT PWB

For Service Manuals
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8 Cherry Tree Road, Chinnor
Oxfordshire, OX9 4QY.
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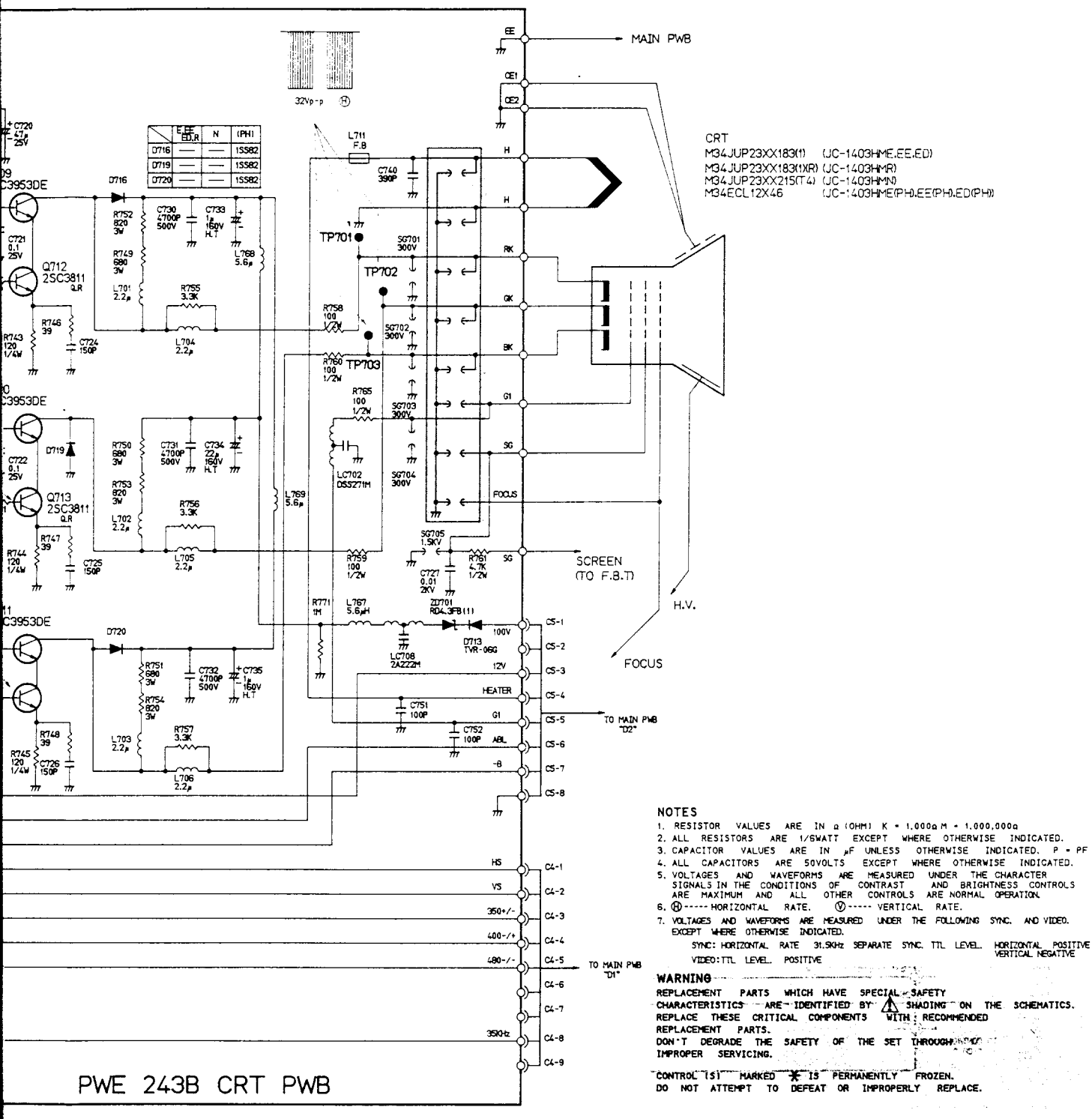
Fax (01844) 352554
email:- mauritron@dial.pipex.com

RUN NO.2



	E.EE ED.R	N	(PH)
D716	—	—	1SS82
D719	—	—	1SS82
D720	—	—	1SS82

NOTES

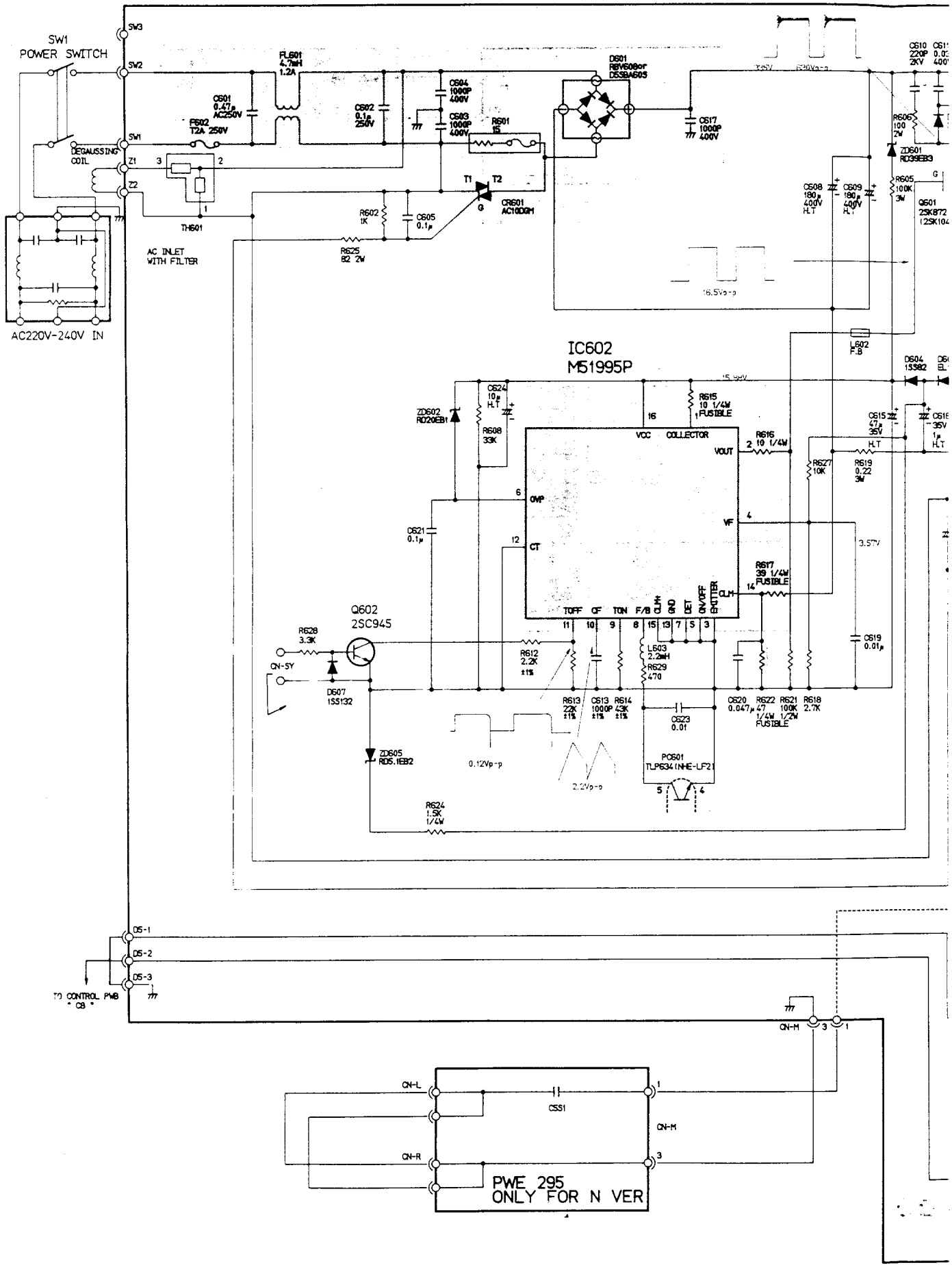
1. RESISTOR VALUES ARE IN Ω (OHM) K = 1,000Ω M = 1,000,000Ω
2. ALL RESISTORS ARE 1/6WATT EXCEPT WHERE OTHERWISE INDICATED.
3. CAPACITOR VALUES ARE IN μF UNLESS OTHERWISE INDICATED. P = PF
4. ALL CAPACITORS ARE 50VOLTS EXCEPT WHERE OTHERWISE INDICATED.
5. VOLTAGES AND WAVEFORMS ARE MEASURED UNDER THE CHARACTER SIGNALS IN THE CONDITIONS OF CONTRAST AND BRIGHTNESS CONTROLS ARE MAXIMUM AND ALL OTHER CONTROLS ARE NORMAL OPERATION.
6. Ⓗ----- HORIZONTAL RATE. Ⓥ----- VERTICAL RATE.
7. VOLTAGES AND WAVEFORMS ARE MEASURED UNDER THE FOLLOWING SYNC. AND VIDEO. EXCEPT WHERE OTHERWISE INDICATED.
   SYNC: HORIZONTAL RATE 31.5KHz SEPARATE SYNC. TTL LEVEL. HORIZONTAL POSITIVE VERTICAL NEGATIVE
   VIDEO: TTL LEVEL. POSITIVE

WARNING

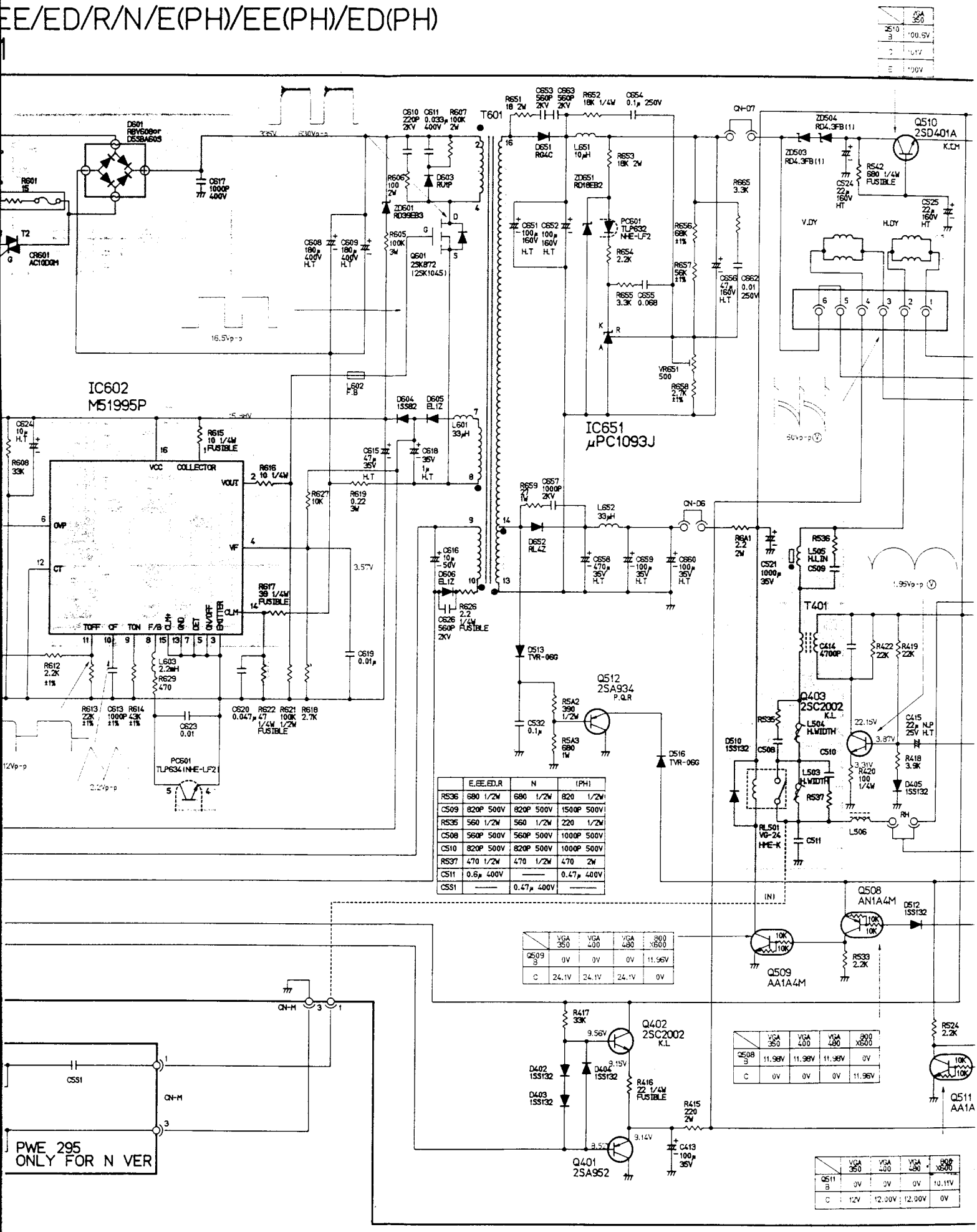
REPLACEMENT PARTS WHICH HAVE SPECIAL SAFETY CHARACTERISTICS ARE IDENTIFIED BY ⚠ SHADING ON THE SCHEMATICS. REPLACE THESE CRITICAL COMPONENTS WITH RECOMMENDED REPLACEMENT PARTS.
DON'T DEGRADE THE SAFETY OF THE SET THROUGH IMPROPER SERVICING.

CONTROL (S) MARKED ✱ IS PERMANENTLY FROZEN.
DO NOT ATTEMPT TO DEFEAT OR IMPROPERLY REPLACE.

MODEL JC-1403HME/EE/ED/R/N/E(PH)/EE(PH)/ED(PH)
SCHEMATIC DIAGRAM



EE/ED/R/N/E(PH)/EE(PH)/ED(PH)
1

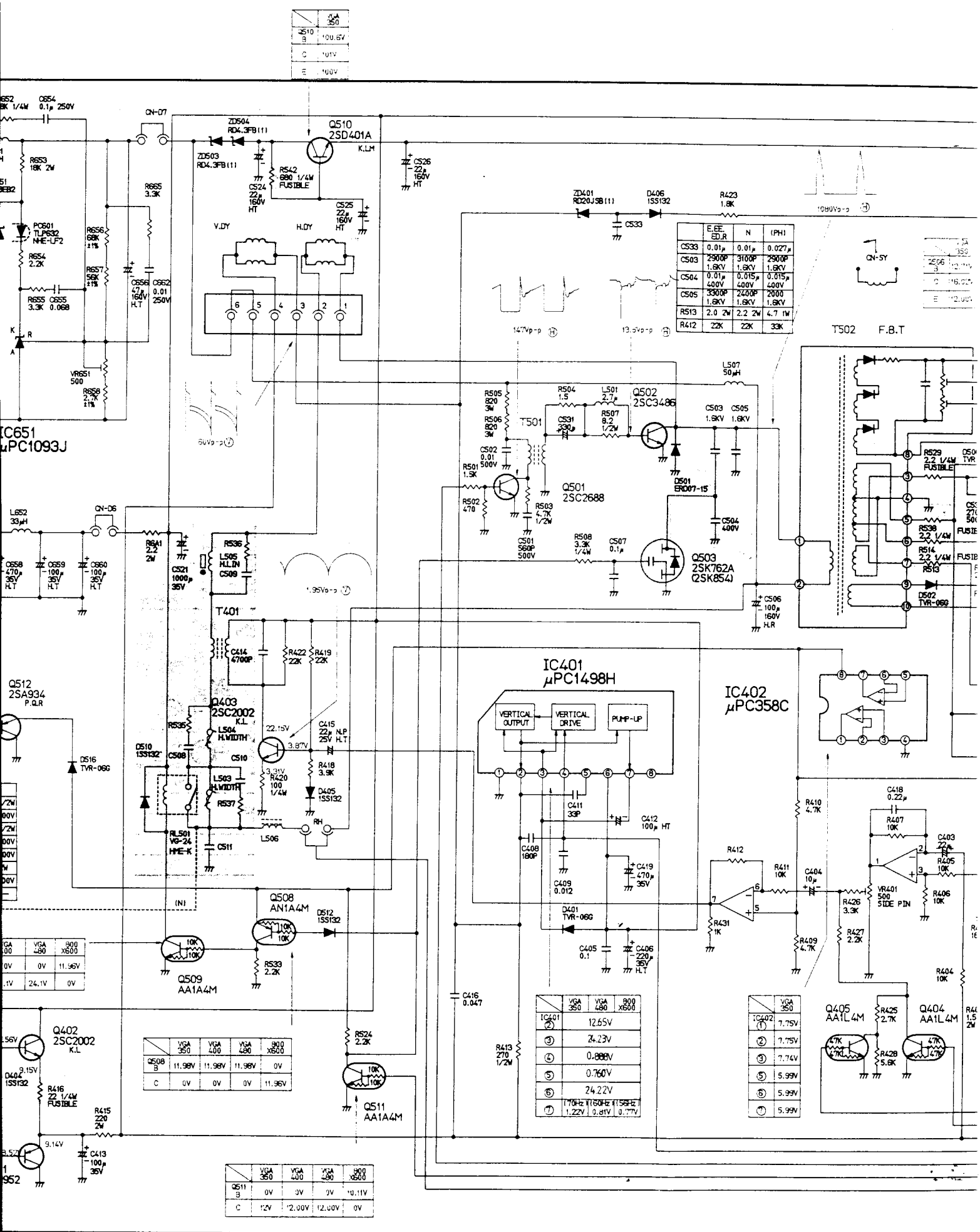


	E,EE,ED,R	N	(PH)
R536	680 1/2W	680 1/2W	820 1/2W
C509	820P 500V	820P 500V	1500P 500V
R535	560 1/2W	560 1/2W	220 1/2W
C508	560P 500V	560P 500V	1000P 500V
C510	820P 500V	820P 500V	1000P 500V
R537	470 1/2W	470 1/2W	470 2W
C511	0.6μ 400V	——	0.47μ 400V
CSS1	——	0.47μ 400V	——

	VGA 350	VGA 400	VGA 480	800 X600
Q509 B	0V	0V	0V	11.96V
C	24.1V	24.1V	24.1V	0V

	VGA 350	VGA 400	VGA 480	800 X600
Q508 B	11.98V	11.98V	11.98V	0V
C	0V	0V	0V	11.96V

	VGA 350	VGA 400	VGA 480	800 X600
Q511 B	0V	0V	0V	10.11V
C	12V	12.00V	12.00V	0V



	VGA 350
Q510 B	100.65V
C	101V
E	100V

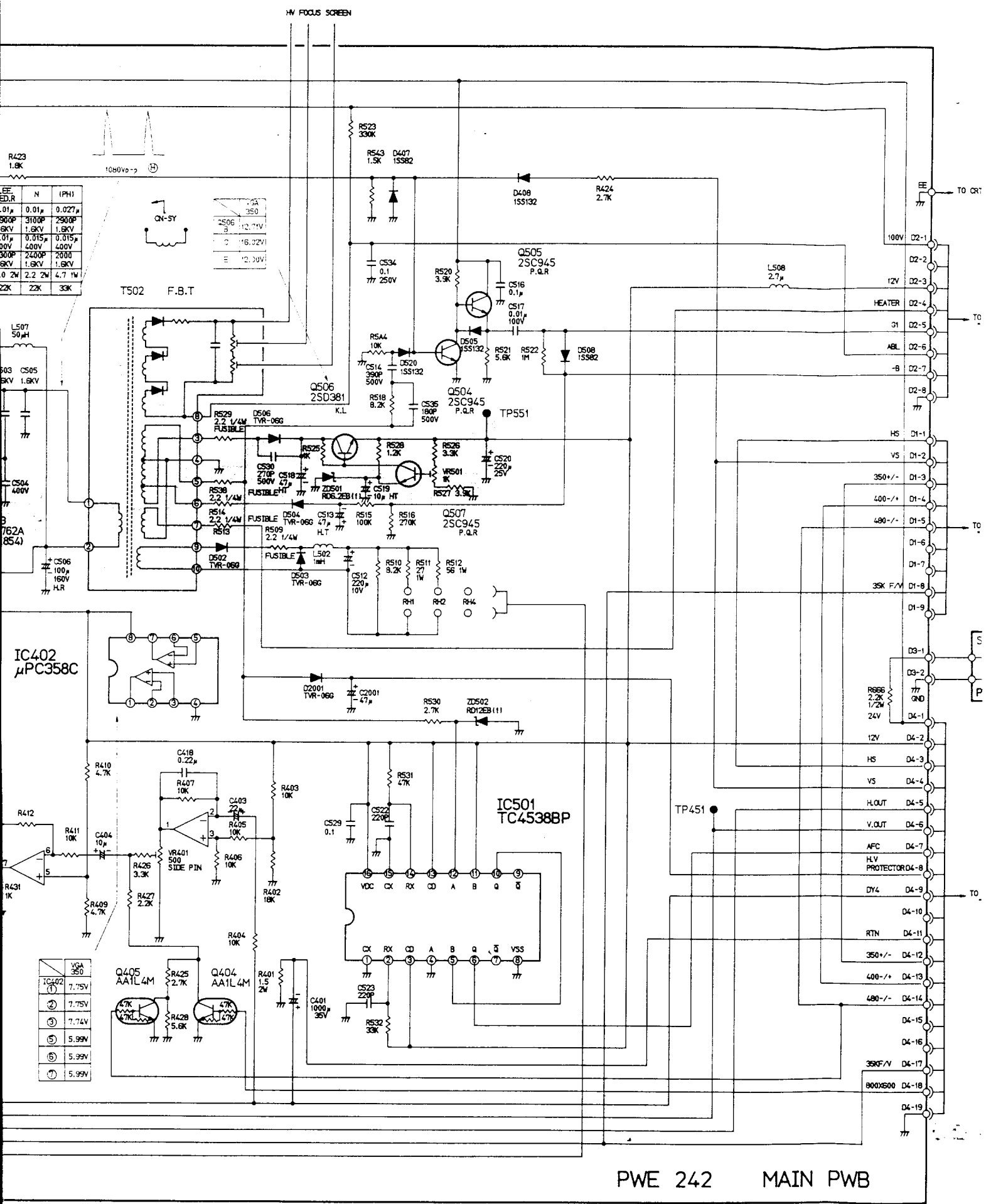
	E.EE. ED.R	N	(PH)
C533	0.01μ	0.01μ	0.027μ
C503	2900P 1.6KV	3100P 1.6KV	2900P 1.6KV
C504	0.01μ 400V	0.015μ 400V	0.015μ 400V
C505	3300P 1.6KV	2400P 1.6KV	2000 1.6KV
R513	2.0 2W	2.2 2W	4.7 1W
R412	22K	22K	33K

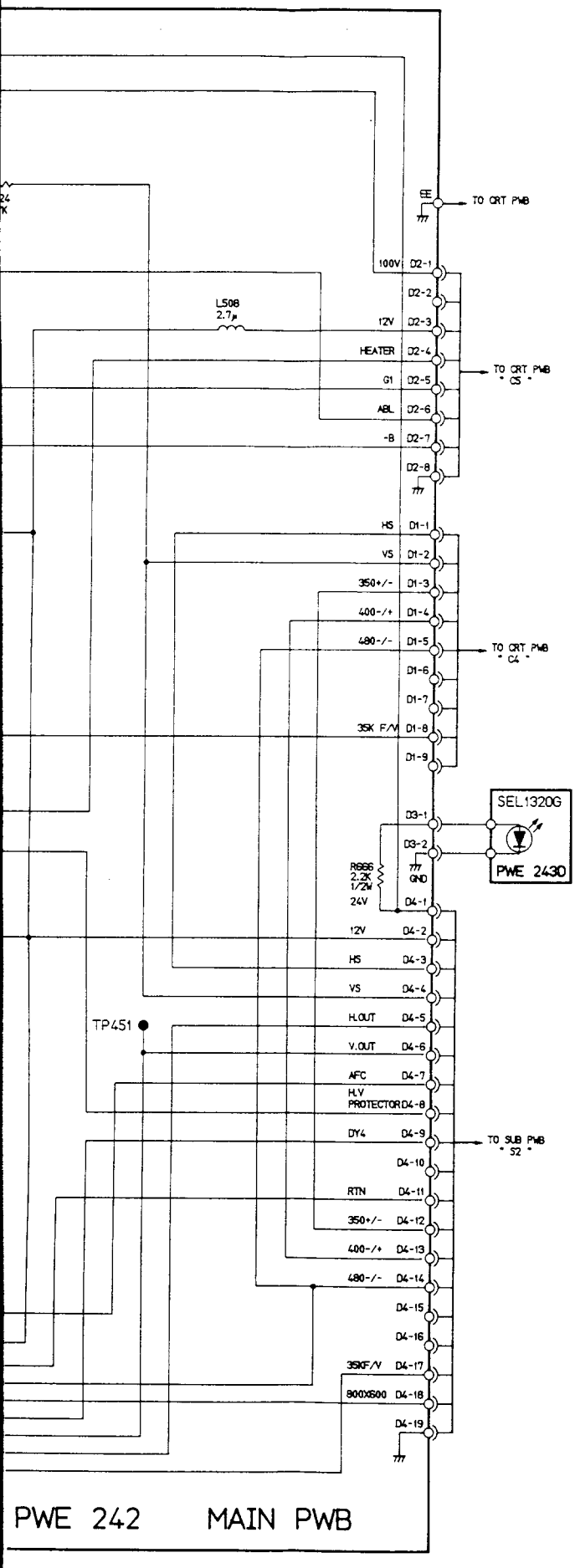
	VGA 350	VGA 480	800 X600
IC401 ②	12.65V		
③	24.23V		
④	0.888V		
⑤	0.760V		
⑥	24.22V		
⑦	170Hz X(60Hz X(15GHz		
	1.22V	0.81V	0.77V

	VGA 350
IC402 ①	7.75V
②	7.75V
③	7.74V
④	5.99V
⑤	5.99V
⑦	5.99V

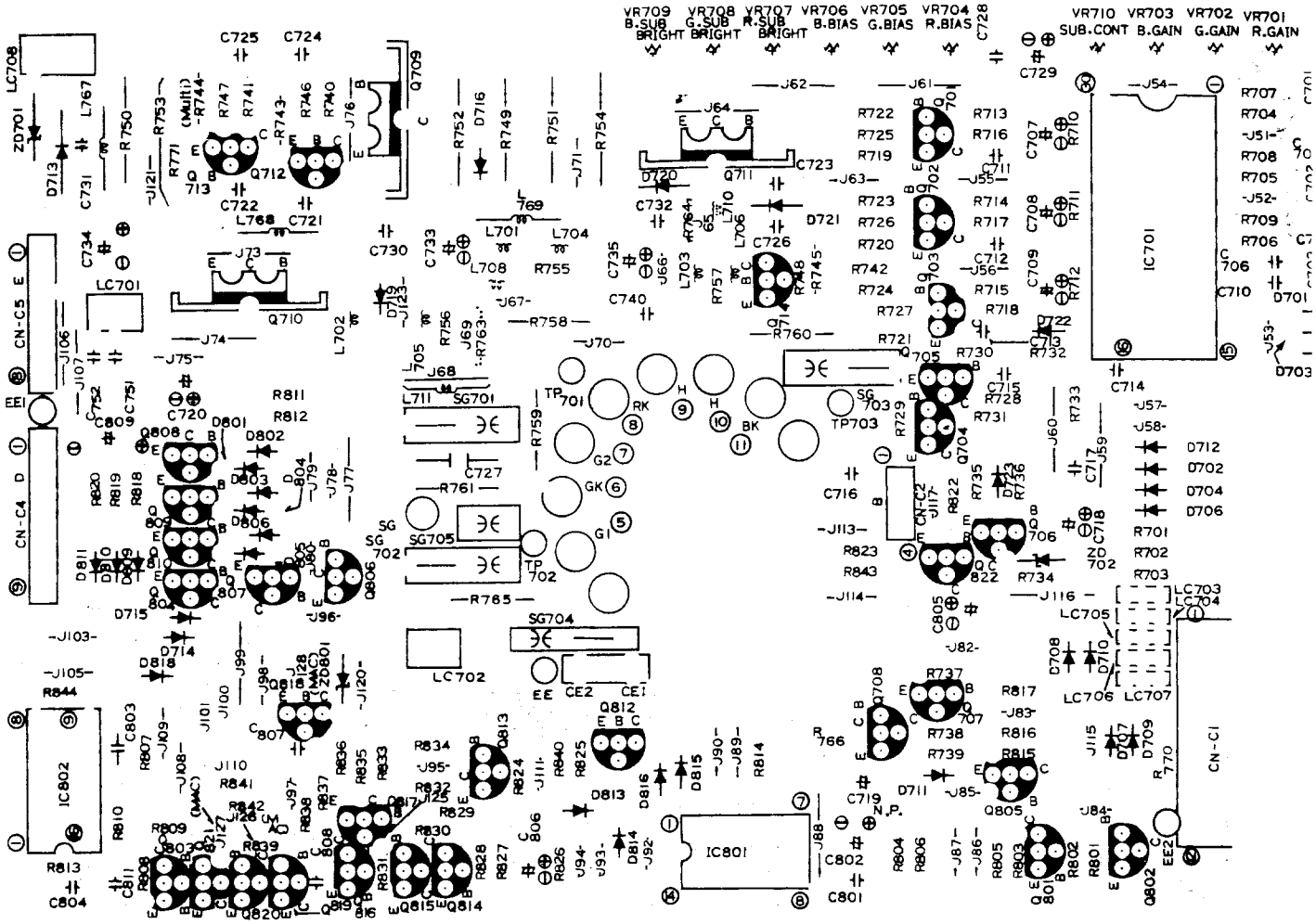
	VGA 350	VGA 400	VGA 480	800 X600
Q508 B	11.98V	11.98V	11.98V	0V
C	0V	0V	0V	11.96V

	VGA 350	VGA 400	VGA 480	800 X600
Q511 B	0V	0V	0V	10.11V
C	12V	12.00V	12.00V	0V


HV FOCUS SCREEN
T502 F.B.T
Q505 2SC945 P.Q.R
Q506 2SD381 K.L
Q504 2SC945 P.Q.R
Q507 2SC945 P.Q.R
TP551
TP451
IC402 μPC358C
IC501 TC4538BP
Q405 AA1L4M
Q404 AA1L4M
VR401 500 SIDE PIN
VR501 1K
PWE 242 MAIN PWB


TO CRT PWB
100V D2-1
D2-2
L508
2.7μ
12V D2-3
HEATER D2-4
TO CRT PWB
" CS "
G1 D2-5
ABL D2-6
-B D2-7
D2-8
HS D1-1
VS D1-2
350+/- D1-3
400-/+ D1-4
480-/- D1-5
TO CRT PWB
" C4 "
D1-6
D1-7
35K F/V D1-8
D1-9
SEL1320G
D3-1
D3-2
PWE 2430
R666
2.2K
1/2W
GND
24V D4-1
12V D4-2
HS D4-3
VS D4-4
TP451
H.OUT D4-5
V.OUT D4-6
AFC D4-7
H.V
PROTECTOR D4-8
DY4 D4-9
TO SUB PWB
" S2 "
D4-10
RTN D4-11
350+/- D4-12
400-/+ D4-13
480-/- D4-14
D4-15
D4-16
35KF/V D4-17
800X600 D4-18
D4-19
PWE 242 MAIN PWB

RUN NO.2



CRT PWB ASSY (PWE-243B)

—Solder side—

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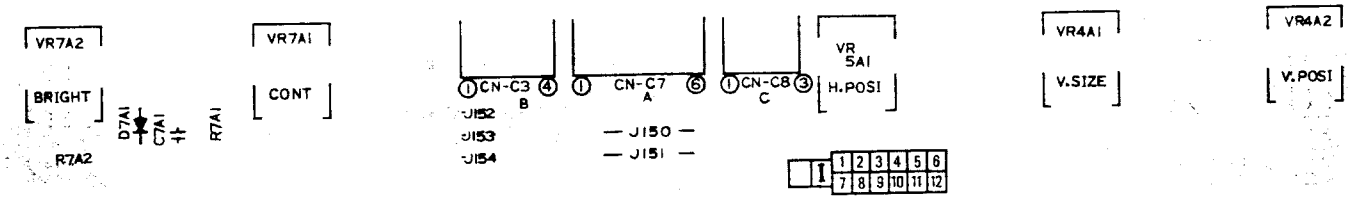
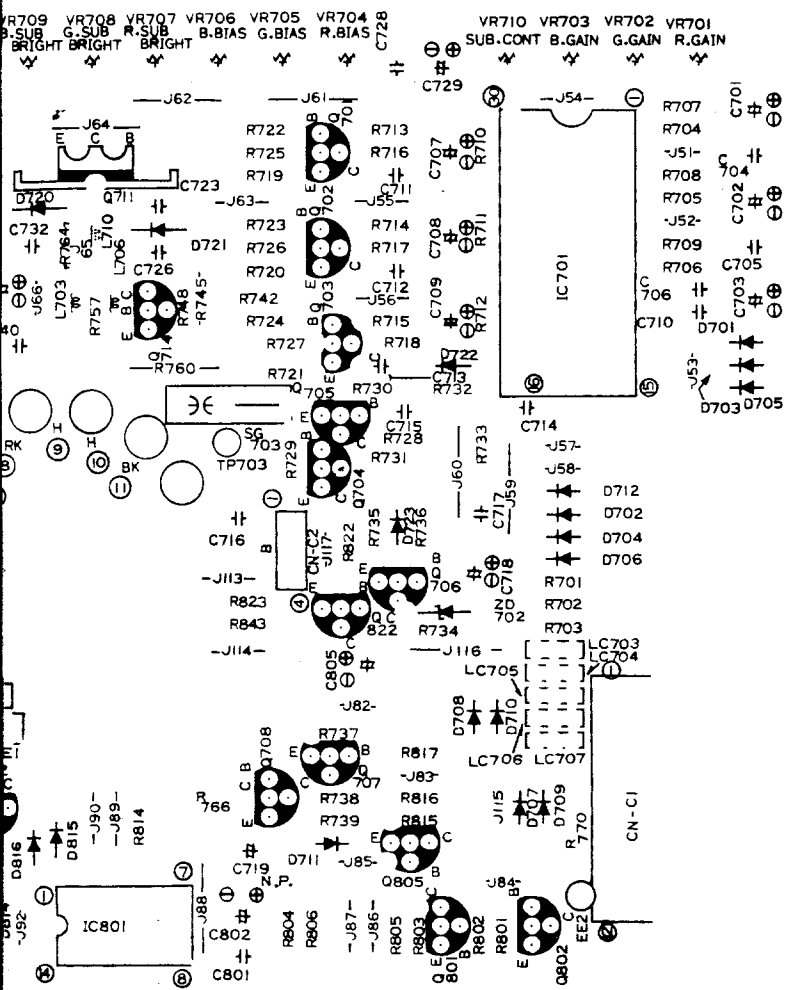
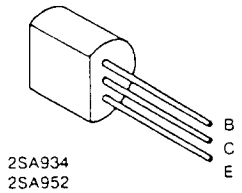


VR PWB ASSY (PWE-243C)

—Solder side—

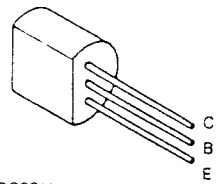

VR709 VR708 VR707 VR706 VR705 VR704
B.SUB BRIGHT G.SUB BRIGHT R.SUB BRIGHT B.BIAS G.BIAS R.BIAS
VR710 VR703 VR702 VR701
SUB.CONT B.GAIN G.GAIN R.GAIN
IC701
IC801
TP703
D720 D721 D722 D701 D702 D703 D704 D705 D706 D712
Q711 Q701 Q702 Q703 Q704 Q705 Q706 Q707 Q708 Q822 Q805 Q802 Q801
CN-C1 CN-C2 CN-C7 CN-C8
LC703 LC704 LC705 LC706 LC707
N.P.

SY (PWE-243B)
er side—



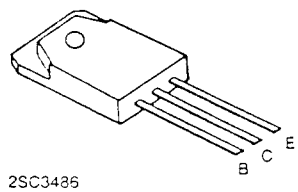
2SA934
2SA952
2SA733
2SC945
2SC2002
AA1A4M
AA1L4M
AN1A4M

2SC3953

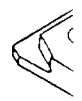


2SC3811

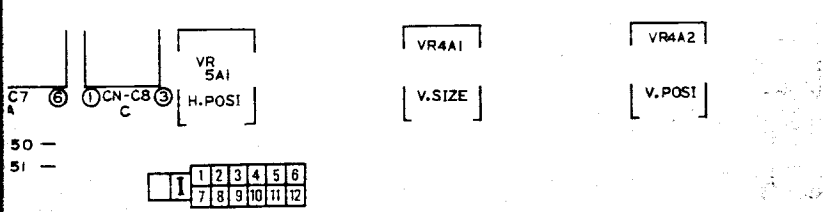
2SD381
2SD401



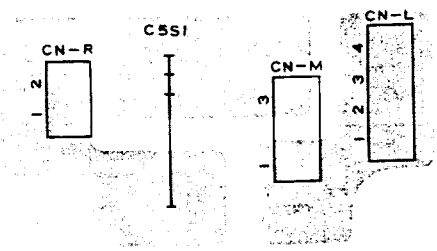
2SC3486



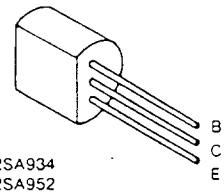
2SK872



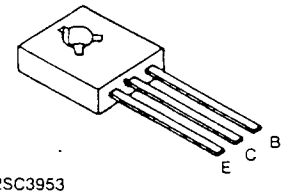
ASSY (PWE-243C)
Solder side—



SSI PWB ASSY (PWE-295)
—Solder side—
model JC-1403HMN



2SA934
2SA952
2SA733
2SC945
2SC2002
AA1A4M
AA1L4M
AN1A4M



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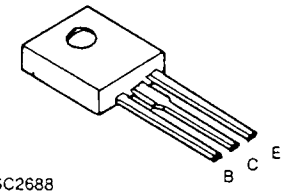
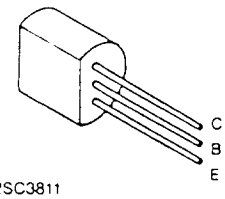


2SC2688



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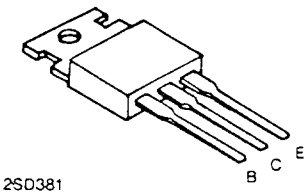
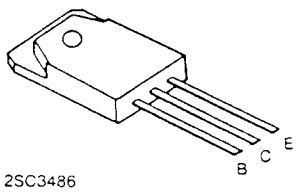
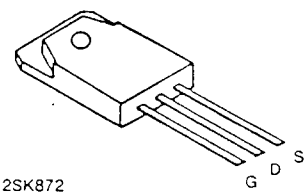


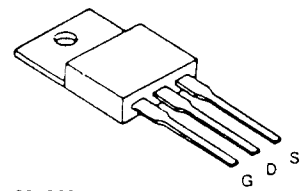
2SD381
2SD401



2SC3486



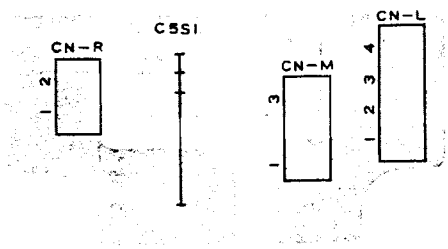
2SK872



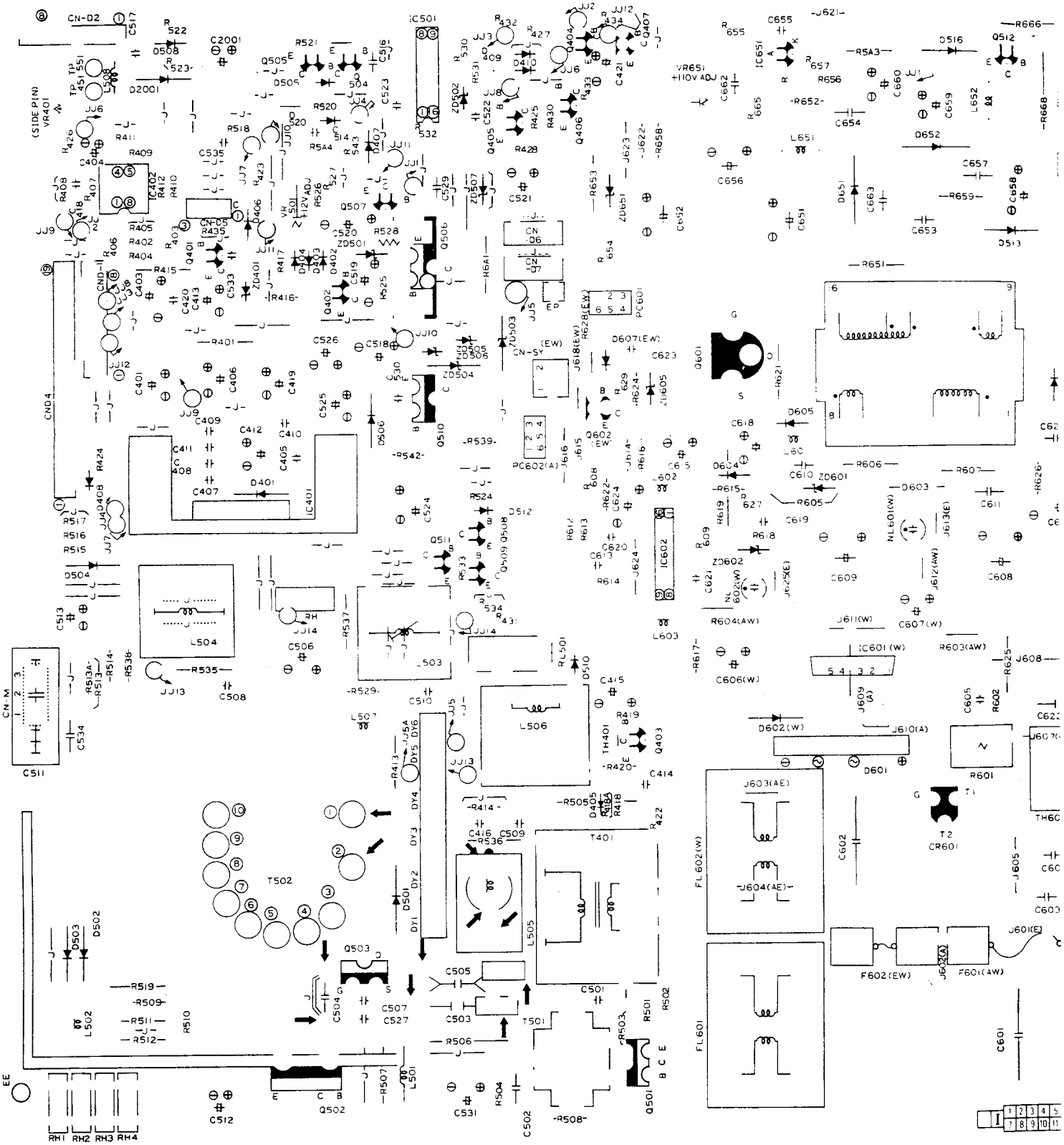
2SK762

NOTE:

E: EMITTER
B: BASE
C: COLLECTOR
G: GATE
D: DRAIN
S. SOURCE

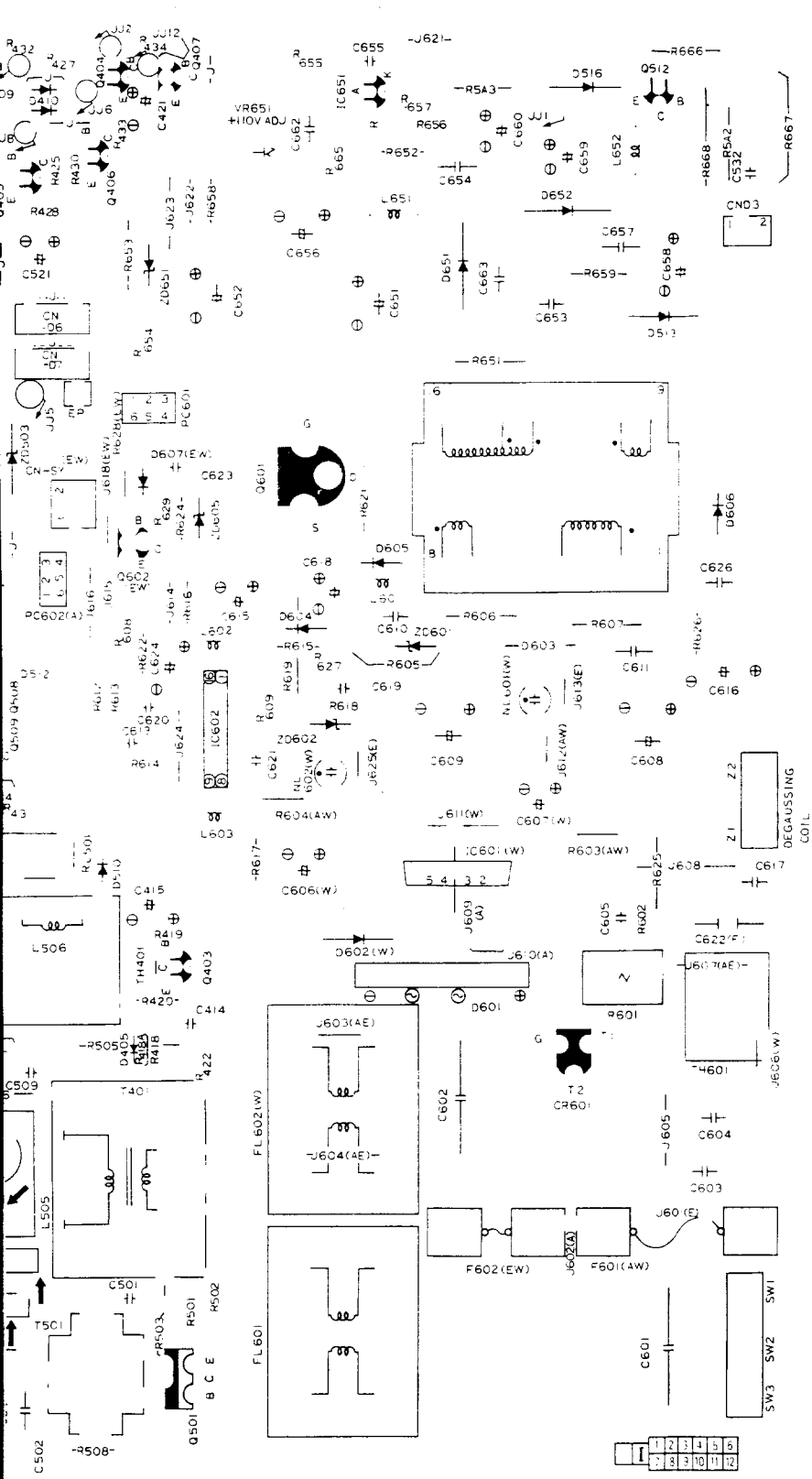


SSI PWB ASSY (PWE-295)
—Solder side—
model JC-1403HMN



MAIN PWB ASSY (PWE-242)

—Solder side—


VR651
+110V ADJ
D516
Q512
D652
D513
R651
D607(EW)
D605
D606
D604
D603
D602(W)
D601
T2
CR601
T401
T501
Q501
Q403
Q404
Q406
Q407
IC602
IC601(W)
R666
R667
R668
R659
C626
C616
C608
C609
C611
C617
C603
C604
C605
C601
C602
C606(W)
C607(W)
C623
C654
C655
C656
C657
C658
C653
C652
C651
C663
C660
C659
C662
C532
C509
C501
C502
C414
C415
L506
L505
L652
L651
L501
L603
FL602(W)
FL601
F602(EW)
F601(AW)
DEGAUSSING
COIL
SW1
SW2
SW3
R603(AW)
R604(AW)
R605
R606
R607
R608
R609
R610
R611
R612
R613
R614
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R616
R617
R618
R619
R620
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R626
R627
R629
R652
R653
R654
R655
R656
R657
R658
R665
R5A3
R5A2
R5A1
R428
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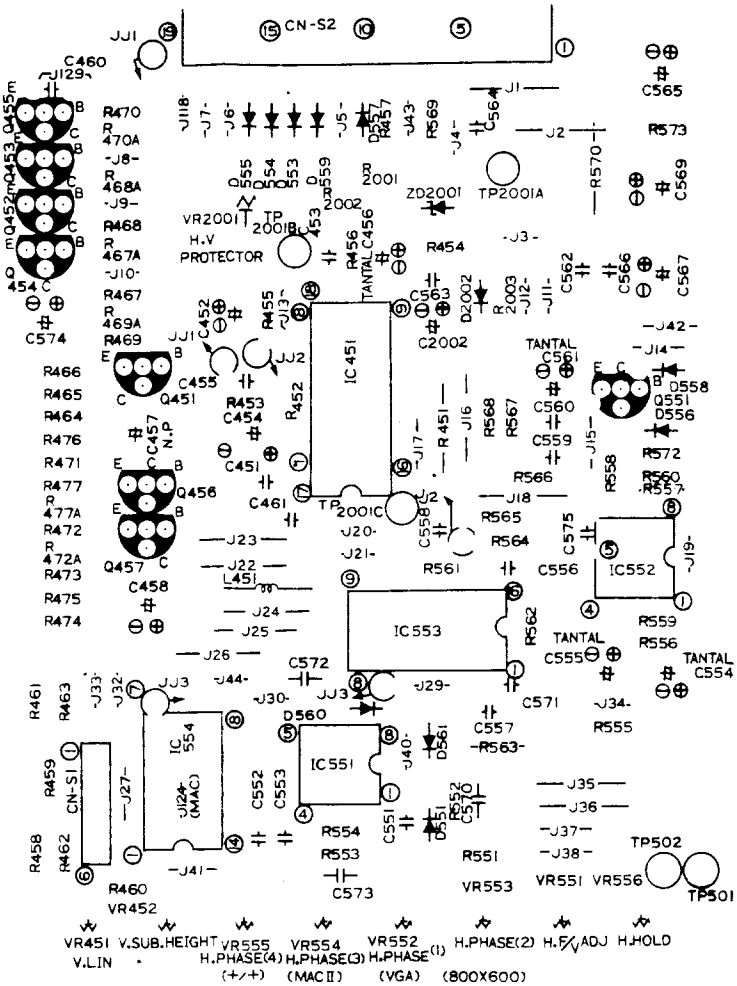
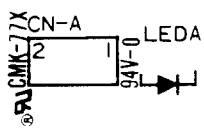
C465
C466



SUB PWB ASSY (PWE-243A)

—Solder side—



LED PWB ASSY (PWE-243D)

—Solder side—